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Dopad narkoterorismu na bezpečnostní prostředí amerických kontinentů

Impact of Narcoterrorism on the Security Environment in the Americas

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Poděkování

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Prohlášení

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V Praze, dne 27. 3. 2019 Tomáš Kristlík

Abstrakt

Tato disertační práce si klade za cíl předložit strategickou kvalitativní ekonomickou analýzu průmyslu ilegálního obchodu s drogami, jež se ve své moderní formě vyvinul napříč americkými kontinenty především v druhé polovině 20. století, s hlavním důrazem na Kolumbii a Mexiko. Následně pak provést analýzu jeho dopadu na bezpečnostní prostředí amerických kontinentů ve snaze formulovat uchopitelná doporučení a komplexní návrhy na jeho narušení. Hlavní premisou práce a vodítkem pro pozdější vyvozování konečných závěrů je, že obchodní transakce představuje podstatu pašování drog a jeho hlavním smyslem je tvorba hmotného zisku. Z tohoto důvodu ekonomická analýza tématu skýtá největší perspektivu ve smyslu formulace uchopitelných závěrů a doporučení. Narkoterorismus, i obecněji násilí spojené s obchodem s drogami, tato práce uchopuje, analyzuje a vysvětluje jako obchodní taktiku, která je nedílnou a klíčovou součástí obchodního modelu pašování drog. V závěrečné sekci práce rovněž předloží kritickou analýzu existujících strategických přístupů při potlačování obchodu s drogami ve snaze identifikovat nedostatky těchto přístupů a poskytnout alternativní efektivnější strategické postupy a nástroje pro řešení problematiky.

Abstract

This dissertation aims to provide a strategic qualitative economic analysis of the illicit drug trafficking industry as it evolved in its modern form across the Americas in the latter part of the 20th century, with principal focus on Colombia and Mexico, and to assess its impact on the security environment in the Americas with the ultimate ambition to provide tangible recommendations for complex disruptive countermeasures. The key premise upon which all the conclusions are later formulated is that trafficking in illicit substances is primarily an entrepreneurial activity aimed to generate profit and economic approach to the issue therefore yields the most promising prospects for tangible results. Narcoterrorism in its own merit, and drug-related violence in general, is contemplated, analyzed and explained as one of the key tactics inherent to the trafficking business model. Finally, a critical assessment of existing counter-narcotics strategies is performed in order to outline deficiencies of these policies with the aim to provide alternative and more effective countermeasures against illicit trafficking.

Klíčová slova:

Narkoterorismus, ilegální obchod s drogami, ilegální sítě, analýza sociálních sítí, strategická analýza

Keywords:

Narcoterrorism, illicit drug trafficking, illicit networks, social network analysis, strategic analysis

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INTRODUCTION

Nowadays, there are many buzzwords in the realm of international affairs with narcoterrorism being one of the frequently used ones. Despite the fact that many domestic and foreign policy decisions of various countries are linked to this term, semantically and analytically it remains rather ambiguous in its focus and implications depending on which part of the word in emphasized. Originally, the term narcoterrorism was first coined by Peruvian President Fernando Belaúnde Terry in 1982 to describe terrorist tactics, such as assassinations and car bombs, employed by drug traffickers against anti-narcotics law enforcement forces in Peru and Colombia in the early 1980s.[1] In this context, narcoterrorists are individual members of drug cartels[2] or other criminal enterprises, whose actions attempt to influence government policies by systematic threat or use of real violence. Such description takes drug trafficking entities as the analytical object of reference, with the illicit smuggling representing the primary activity and terrorism depicting optional tactics, which is occasionally deployed.

Trafficking in illicit substances is entrepreneurial activity aimed to generate profit. In that sense, the only difference between cocaine smugglers and car sellers is the legal status of their respective products. This statement is not intended to avoid the obvious moral relativity implied in that example, it is to point out the core fact and inevitable key assumption upon which any analysis of the topics must built upon: illicit drug trafficking is above all a business activity. Nevertheless, there is a key and prominent feature to this business activity, which makes it rather unique: the use of excessive violence. I define narcoterrorism, the keyword in the title of this dissertation, as "the use of excessive violence as indispensable business tactic to secure operational environment for profit-seeking illicit drug smuggling enterprise."

Illicit drugs are a commodity, trafficking industry is guided by the same economic logic as any other commercial activity. It is the legal status that makes difference in key aspects of illicit trafficking business models. The main deficiency resulting from the illegal status of certain drugs is the absence of a legal authority enforcing rules. When there is a conflict between companies like Pfizer, Merck or Novartis, their disputes regarding trademarks, mergers, acquisitions, insider trading, employee rights, tax evasions or frauds will be handled by attornies and settled by respective court's ruling. There is no such tool available for illicit drug traffickers. There is no central legal authority to rule over territorial disputes, trademark issues or any other troubles a legal enterprise might encounter in its daily operational environment. Illicit traffickers need to provide solutions on their own to settle disputes involved in their business operations. Bribery and violence have become the tactics of choice due to their universal applicability and effectivity. Excessive violence rose to such a prominence among illicit drug traffickers that the term narcoterrorism was coined quite early in the evolution of the modern day illicit drug industry in the Americas to describe the scope and extent of violence involved.

Prosperity and development in the Americas have been challenged by a variety of security threats, traditional and modern in nature, but none so far as menacing as narcoterrorism. Wars, foreign invasions, insurgencies, these dangers have been present for many states ever

[1] "Police Station Attacked Near Site of Peru Prison Break," *UPI Archives*, March 9, 1982, https://upi.com/4256756.

[2] Throughout the thesis, I occassionally use the term "cartel" in its popular significance, as a reference to illicit drug trafficking organization of substantial size and capacity, without implication of collusive price fixing.

since they gained independence from Spain. Natural disasters, unemployment, lack of education, demographic issues, weaken rule of law in many states represent some of the most urgent modern ones. Illicit drug trafficking belongs to both of these categories. In countries such as Colombia or Mexico, smuggling has long and prosperous tradition dating back to at least the 19th century. Nevertheless, industrial level trafficking in illicit narcotics, primarily marijuana and cocaine, is a phenomenon created in the 1960s and 1970s when the United States developed a nation-wide passion for Latin American psychoactive plants consumption thus creating the largest consumer market in the world. In less than a decade after the U.S. demand stimulated increase in supply individuals such as Pablo Emilio Escobar Gaviria turned from local petty criminals and smugglers into drug lords controlling large trafficking enterprises with vast international network moving tons of cocaine across Latin America into the United States and Europe. Among the most effective tactics used by Escobar and other illicit drug industry tycoons have been bribe and brutal violence aimed at anyone representing an obstacle in their profit-making. Tens of thousands of murder victims representing a collateral of the illicit drug trade across the Americas in the few decades lead to the notion of labeling Escobar and his modern day counterparts not as mere drug lords anymore, but rather as narcoterrorists.

Narcoterrorism, fueled and underlined by substantial profits, is the salient feature of illicit drug trafficking and the most special element of the whole phenomenon. Without excessive violence, trafficking is more or less just another business activity with different legal status. The violence guarantees and safeguards the whole enterprise by reducing inherent risks present in its operational environment. Excessive violence inevitably attracts public attention. Attention dedicated to drug trafficking related violence often results in overestimating the role violence plays in the whole enterprise and therefore deviates attention from the real center of gravity: the trade. Evidence for this hypothesis can be found regularly on pages of major U.S. newspapers at least since 2006 under the catchy headlines usually referring to Mexican drug wars. But violence is a symptom here, not the core problem. Excessive attention paid to violence is unfortunate but to a large degree it is understandable notion since militarization of the vocabulary started decades ago, when the term War on Drugs was introduced to the public.

On 17 June 1971, President Richard Nixon declared that "America's public enemy number one in the United States is drug abuse. In order to fight and defeat this enemy, it is necessary to wage a new, all-out offensive."[3] Despite the broad outline of the administration's original policy, which Nixon explained in his Special Message to the Congress on Drug Abuse Prevention and Control submitted on the same day[4] arguing for a multilateral approach, in the end the Nixon's and all subsequent administrations gravitated towards a hardline strategy focused primarily on suppressing the supply side of the drug trade. This ultimately international effort was popularized under the label War on Drugs and since 1971 unparalleled amount of money, manpower and resources have been spent in combating the phenomenon.

In 2019, it is plausible to declare the War on Drugs has failed to accomplish its intended outcome to disrupt and disable the supply side of illicit drug trade. Today, the most successful

[3] Richard Nixon, "Remarks About an Intensified Program for Drug Abuse Prevention and Control," (speech, Washington, DC, June 17, 1971), The American Presidency Project, https://www.presidency.ucsb.edu/node/240238.

[4] Richard Nixon, "Special Message to the Congress on Drug Abuse Prevention and Control," (speech, Washington, DC, June 17, 1971), The American Presidency Project, https://www.presidency.ucsb.edu/node/240245.

transnational profit-seeking illicit networks (PSINs) in the Americas, such as the Sinaloa cartel, resemble international corporations such as Chevron or Monsanto. They have sophisticated business models, effective management structures with thousands of employees and affiliates across dozens of countries on different continents. Their annual profits from large portfolio of illegal activities, from drugs to human trafficking, are in billions of untaxed USD. Such a revenue enables them to shape their operational environment, providing resources to build private armies, to corrupt the system in seemingly any country in which they operate by bribing local, state or federal police officers, judges and government representatives. At this point, Latin American international profit-seeking illicit networks such as the Sinaloa cartel are beyond effective reach of any single government in the Americas with their operations corrupting government efforts to such extent the nation states are rendered strategically helpless. Such a status has never been achieved by any other illicit enterprise. This substantial qualitative and quantitative evolution observed under the presumed duress of war waged on them for decades is a great source of concern as much as inspiration for analysis.

The inevitable first general observation, which provides the core motivation behind this dissertation, is that the key premise upon which the strategy guiding the War on Drugs is inaccurate if not completely wrong. Even a superficial study of the issue relying simply on media and other non-scholarly sources reveals a clear contrast between resources spent on eradicatation of the supply side of illicit drug trade and successful evolution of profit-seeking illicit networks witnessed all over Latin America. The resulting hypothesis postulates that in the mainstream counter-narcotics policy there has been a significant mismatch between the perceived and the real centers of gravity in the illicit narcotics industry, hence the mainstream policy failure. A different approach is therefore worth considering.

This dissertation aims to provide a qualitative strategic economic analysis of narcoterrorism and more generally of illicit trafficking phenomenon as it evolved in Latin America, primarily in Colombia and Mexico, since the 1960s and 1970s with the main objective to overcome perceived rigidity and deficiencies in examination of narcoterrorism resulting from predominantly quantitative operational legal approach to the issue. The main objective of this paradigm shift is to deliver analysis which provides deeper insights, wields more explanatory power and has the potential to introduce changes into conceptual framework from which recommendations for policy makers could stem.

Methodology

Inherent limitations of the narrative

The essential prerequisite for any successful enterprise, not to mention an illicit one, is to safeguard its business model and related operational aspects. Confidentiality and concealment protect the know-how. Unfortunately, for any aspiring researcher there are objectively existing limits to how much can be discovered about an enterprise, its strategies, policies, management, finances or most importantly, its decision-making processes. To provide a point in case, estimates of illicit drug-related profits already represent a fundamental challenge.

Most studies on the illicit drug business have had difficulty establishing the exact earnings of drug trafficking organizations in Colombia, Mexico or elsewhere. Since the business is illegal, there is no certainty on how many kilograms of cocaine were produced each

year and exactly how much of the product was sold in the international market. It is also difficult to establish the exact upstream costs to produce a kilogram of cocaine and to exact downstream costs to ship a kilogram of cocaine and to launder the profits. Regardless, some economists have attempted to calculate the net earnings from the cocaine industry in the 1980s and 1990s; estimates range from as low as $170 million to as high as $5 billion per year.[5] In comparison, in 1994 the oil industry's earnings were about $3 billion a year or 5.7 percent of Colombia's GDP. It is estimated that the Medellín-based traffickers were billionaires by the mid-1980s. Some conservative estimates, such as the one calculated by Forbes magazine in 1987, indicated that Pablo Escobar was worth $3 billion.[6] His associate from Medellín, Gonzalo Rodríguez Gacha, joined the Forbes World's Billionaires List in 1988 with his alleged worth estimated at $1.3 billion.[7] When PBS's *Frontline* asked Juan David Ochoa how much money he had made from drug trafficking, he said probably some $20-25 million.[8] Regardless of this discrepancy in trafficker's earnings, the money fueled support for the businesses that became an additional sources of income and employment in Colombia.

When only bits and pieces of information and stories become available, often from dubious sources relying on a third-party testimony or simple hear and say, the only productive approach to analysis is factual cross-check, compare and contrast approach and cross-referencing interviews with insiders that might yield some more general observations from which strategic conclusions can be drawn. In other words, focusing on the entire perspective rather than particularities might actually lead to some tangible results.

Moreover, in pursuit of tangible results, this dissertation will limit its focus and research to the body of evidence available by the end of Mexican President Felipe Calderón's tenure in 2012. Arguably, setting a limit to the scope of inquiry might enable the researcher to look at the issue with a little bit of perspective, which is desirable for any strategic contemplation.

Qualitative v. Quantitative Approach

Analyses of illicit trafficking in the Latin American region often focus on quantitative aspects such as volume of illicit substances smuggled through the region and into the United States, the largest market for narcotics in the world; profit generated by drug sales or number of casualties suffered in the ongoing struggle to suppress this illegal phenomenon. In order to achieve a better understanding of this complex and complicated issue, I suggest to emphasize qualitative aspects such as evolution of internal organization, their business models and *modus operandi*, since qualitative characteristics of trafficking organizations and their operations determine quantitative outcomes such as volume of drugs smuggled or profit generated not vice versa.

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[5] Patrick L. Clawson and Rensselaer W. Lee III, *The Andean Cocaine Industry* (New York: St. Martin's Press, 1996).

[6] David Henry, "Pablo Escobar-Gaviria, Chief Paisa," *Forbes*, October 5, 1987, https://www.forbes.com/pictures/eehd45ekgjj/1987-2/#11f48f196842.

[7] Erin Carlyle, "Billionaire Druglords: El Chapo Guzman, Pablo Escobar, The Ochoa Brothers," *Forbes*, March 13, 2012, https://www.forbes.com/sites/erincarlyle/2012/03/13/billionaire-druglords-el-chapo-guzman-pablo-escobar-the-ochoa-brothers/#583934a05ef4.

[8] Juan David Ochoa, interview by PBS Frontline, 2000. https://www.pbs.org/wgbh/pages/frontline/shows/drugs/interviews/ochoajdo.html.

Strategic v. Operational/Tactical Focus

In contrast to operational or tactical level analyses, strategically focused studies seem to be much less frequent, possibly due to a fact that illicit trafficking on a strategic level is beyond the reach of national governments in Latin America and transnational organizations such as the United Nations or the Organization of American States, which depend on the will of their individual members and have no jurisdiction in addressing the issue effectively.

On a tactical level, suppressing drug trafficking is a responsibility of local and national law enforcement agencies. Operational level issues, such as national counter-narcotics policies, fall within the jurisdiction of national governments. In contrast, there is no entity with the ability to effectively address illicit trafficking and narcoterrorism on strategic level, mostly because the most powerful trafficking organizations today operate across national territories, waters, airspaces, across the Americas and other continents as well. Yet, strategic level focus is of vital importance because symmetric approach is the first prerequisite of success in dealing with complex and widespread illicit trafficking and narcoterrorism.

Furthermore, strategically, the two main concepts applied in counter-narcotics efforts have been the supply-side and demand-side suppression. This dissertation will mostly focus on assessment of the former, since I believe that formulating complex, coherent and effective supply-side suppression strategy remains a challenge some 40 years after the Nixon's declaration of War on Drugs. On the other hand, there is substantial amount of research conclusively proving that education, prevention and treatment are the key concepts for reducing demand. The resulting challenge is therefore implementation of these priorities into practice, which is effectively a policy matter, not a subject of scholarly analyses and assessments.

Economic v. Legal Approach

In my opinion, it is safe to assume that profit is what drives illicit drug traffickers. They might have some other individual or collective aspirations, political or social, but ultimately the unifying factor is the desire for profit. In studying their profit-seeking business-related decision-making, economics as a science focusing on wealth seems to provide the desirable framework for analysis. In contrast, legal perspective offers a viewpoint, where illicit trafficking is not analyzed in its own merit to the full extent of the phenomenon, but its features are compared and contrasted against existing legal definition of criminal behavior. This approach might provide answers as to which specific activities are illegal, but it will not provide answers to why are these activities happening, what motivations and ambitions they express, why and how they evolve.

Nevertheless, the key motivation behind giving preference to economic approach rather than a legal one is the presumed universality of the former and historically demonstrated variability of the latter. Not only legal systems vary between various countries, there is also evolution of legal interpretations over time. From all the relevant examples, I will only mention that opium, mariahuana, metamphetamime and other now illicit substances were legally available in the United States in the 19th and early 20th century. This is not to say evolution and changes within legal systems are inherently negative, it only makes the legal approach unsuitable for the purpose of this dissertation. On the other hand, economics extends beyond the realm of wealth. Alfred Marshall defined it as a study of man in the ordinary business of life. For Marshall, economics enquires how an individual obtains his income and how he uses

it. Thus the study of wealth and on the other and more important side a part of the study of man.[9] To Lionel Robbins economics is primarily about studying human behaviour as a relationship between ends and scarce means which have alternative uses.[10] Ideas and concepts introduced by these two and other economic thinkers discussed in this dissertation will provide guidance in discovering the rationale of illicit trafficker's decision-making on individual, collective and business level.

Applying this alternative approach, I aim to provide a more accurate analysis and assessment of narcoterrorism and the illicit drug trafficking phenomenon in order to establish a more suitable basis to formulate more effective strategy and policy recommendations. In doing so, game theory principles will be applied on some occasions. In formulating strategic suggestions and policy recommendations elements of social network analysis will be introduced and applied to support the argument.

Structure

Part I: Narcotics, the Industry And Its Founders

Part I of this dissertation aims to provide the basic context for analyses presented in Parts II and III, introducing the elementary facts regarding the illicit drug industry in the Americas. Firstly, the main points in history of cocaine will be briefly summarized. Secondly, explanation will be offered why Colombia became the birthplace of the modern day illicit drug industry and why it hosted the first globally operating drug smuggling enterprises. Thirdly, a more detailed overview of the main players and organizations in the illicit narcotics business will be presented. Altogether, these three chapters will provide basic orientation in the subject. A more detailed insights regarding particular aspects of narcotics production, trafficking and consumption will be presented and analyzed in the subsequent parts of the dissertation.

Part II: The Commodity, The Enterprise And The Business Model

Applying mostly subjective approach, part II discusses the key variables of *what*, *who* and *how* in the modern illicit drug industry in the Americas. First, the life cycle of cocaine hydrochloride will be described, from the coca-growing plantations to the end users. Secondly, the illicit enterprise built towards producing, trafficking and selling cocaine will be analyzed and explained using economic theory and logic. Finally, different business models appearing during various stages of the modern day illicit drug industry will be assessed based on their efficiency and sustainability.

Part III: Assessments And Counter-Strategies

Changing perspective from subjective to objective, part III focuses on strategic, economic, political and security impacts of narcoterrorism in order to identify and assess previously deployed strategies to suppress the phenomenon and its corresponding problems. Specific methods, such as criminalization of narcotics or supply reduction, will be evaluated based on relative effectiveness in achieving the strategic objective of reducing illicit smuggling

[9] Alfred Marshall, *Principles of Economics* (London: Macmillan and Co., 1920), 1–2.
[10] Lionel Robbins. *An Essay on the Nature and Significance of Economic Science* (London: Macmillan and Co., 1932), 15.

and related violence. Subsequently, alternative strategies to suppress narcoterrorism will be proposed, including policy recommendations.

Resources

Common wisdom holds that known illicit activity is poorly organized illicit activity. In other words, any successful business model in the realm of illicit enteprises relies on high operational security, protection of know-how and concealment against law enforcement. Inevitably, study and analysis of illicit activities represent a variety of challenges for any student and researcher in the field.

Access to primary resources – that is narcotraffickers themselves – is scarce and limited, especially to those who are still active in their chosen entrepreneurial field. Equally complicated is obtaining information from law enforcement and generally government entities tasked to disrupt illicit trafficking. Their up-to-date information, knowledge and assessments are mostly confidential and rightfully so, since operational security is vital prerequisite of success on both sides.

All the other third party information and assessments carry inevitable bias and interpretations added by respective authors, be it an article in respected academic journal or newspaper article in well-established outlet. Naturally, these outputs still maintain their validity, although it is vital to process them critically and with necessary caution.

Special category among the resources available for investigations represent law enforcement and public officials tasked to mitigate the influx of narcotics and suppress illicit drug enterprises. These individuals often possess invaluable first-hand knowledge experience about the subjects of this dissertation, ranging from detailed knowledge of organizational structure of trafficking enterprises and their daily operations to money laundering and other financial schemes. Unfortunately, there are objectively existing limits on access to this information. Law enforcement agencies rely on confidentiality as much as the subjects of their interest. Therefore, serving or retired officers will not comment in detail on questions regarding current or past operations. Those information that do become available, such as official reports released by the law enforcement operations, often have a narrow focus limited to single operation, single illicit enterprise or its entrepreneurs, or it is too general assessment of complicated issue. Moreover, this kind of information is mostly tactical or operational in nature and strategic conclusions need to be reached independently. Facing this challenge, I decided to draw my own conclusions from the data collected and later consult those with law enforcement officers with the ambition to receive feedback indicating whether my conclusions reflect correctly the state of affairs analyzed in this dissertation.

Another factor that needs to be taken into consideration is that of standard historical research, which improves its quality as the time passes and more information, resources and data for analyses become available to reflect on periods concluded. Therefore, more information is available on drug trafficking in the 1970s, 1980s and 1990s, on illicit entrepreneurship in Colombia at that time, than there is on drug trafficking enterprises operating today. This factor will also reflect on analyses presented in this dissertation.

Bearing in mind all these inherent practical limitations to the research, there is still a substantial body of scholarly work available for the purpose of making strategic rather than

operational and tactical analyses and assessments, which represents the ultimate ambition of this thesis. There were various scholars and authors, whose published works and ideas provided guidance and inspiration for my own conclusions. Many of their key insights and original thoughts are cited and referenced throughout the chapters below. To name the most important authors, the works of Francisco Thoumi, George Grayson and Moisés Naím proved extremely useful in the study of evolution of the modern day illicit drug trafficking industry in Colombia and Mexico. John Arquilla, David Ronfeldt, Phil Williams and Klaus von Lampe were indispensable for understanding the complexities of illicit network analysis. Nathan Patrick Jones provided key insights on the structure and functioning of profit-seeking illicit networks, including their business strategies and capacities in reference to organizational resiliency. Benjamin Lessing and his economic assessment of the drug war in Mexico, combining game theory with observed economic rationalizations of profit-seeking illicit network behavior and business practice, helped significantly to shape my own perceptions on the issue. Tom Wainright delivered much appreciated fresh perspective on many traditional problems within the assessments of the illicit drug industry and gave an impuls to formulate more economically reasonable proposals regarding countermeasures.

1. NARCOTICS, THE INDUSTRY AND ITS FOUNDERS

1.1. From the Coca Plant to Cocaine Hydlochloride

The consumption of psychoactive substances dates as far back as human desire to alter individual conscsiousness aiming to achieve more pleasant, rewarding or elevated state of mind for variety of motives ranging from inducing excitement to supressing physical or emotional pain and religious or cultural purposes. Archaeological evidence indicates the use of psychoactive substances dating back at least 10,000 years, and historical evidence of cultural use over the past 5,000 years.[11]

Today as much as in the past psychoactive substances represent an integral part of our daily lives. The most significant changes over the centuries are in establishment of industrial level supply chain and varying legal status of individual substances. In the pages to follow, the primary subject of concern and analysis will be industralized supply of illicit psychoactive substances in the Americas, mostly cocaine. This study will materialize along three main interconnected axes: establishment and evolution of cocaine-based illicit drug industry, changing nature of the operational environment, and development of Colombian and Mexican enterprises dedicated to trafficking in illicit drugs.

By no means cocaine has been the single article in most trafficker's portfolio, but it is closely connected to the formation and evolution of the modern day illicit drug industry not only in the Americas, but globally. Therefore, the story of narcoterrorism cannot be told without the story of cocaine. But here I describe it only as a cultural phenomenon, cocaine as a commodity will be subject to analysis in Part II.

Although some research suggests that chewing of coca leaves in Peruvian society dates back over 8,000 years ago, cocaine remained unknown product to the most of the world outside Latin America well into the 19th century.[12] Within the next hundred years, by the 1980s, it was a highly profitable commodity produced for mass market consumption.

Thousands of years before cocaine achieved its worldwide fame, the coca leaf was recognized in the Andean region for its medicinal and mystical values and used, mostly by nobility and priests, in religious ceremonies, sacrifices and medical practices.[13] Occassionally, it served the native population to reduce hunger and fatigue. After the Spanish conquest, the native population was often forced to work in silver and gold mines chewing on coca leaves helped to alleviate the harsh physical effects of mine work.[14] Colonial rule resulted in collapse of restrictions on coca use in Inca society, which contributed to its transformation into an accessible drug used by the great mass of the poor indigenous population. However, Spanish colonists did not acquire the taste for coca themselves so the leaf remained relatively unknown outside of Andean region.

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[11] M.D. Merlin, "Archaeological Evidence for the Tradition of Psychoactive Plant Use in the Old World," *Economic Botany* 57, no. 3 (Autumn 2003): 295–323;
Louis Teresi, *Hijacking the Brain:How Drug and Alcohol Addiction Hijacks our Brains - The Science Behind Twelve-Step Recovery* (Bloomington, IN: Authorhouse, 2011), 53.
[12] Jason Palmer, "Coca Leaves First Chewed 8,000 Years Ago, Says Research," *BBC News*, 2 December, 2010, http://www.bbc.com/news/science-environment-11878241.
[13] Andre McNicolI, *Drug Trafficking: A North - South Perspective* (Ottawa: North – South institute, 1983), 7.
[14] Ibid.

In I860, Albert Friedrich Emil Niemann, a German chemist, published his findings about identifying and isolating the principal alkaloid of cocaine and sparkled interest in the substance among medical and scientific communities.[15] Coca soon became prescription drug designed to cure a number of maladies from shyness to stomach ailments. Sigmund Freud, among others, found interest in the drug and came to praise it as an invaluable treatment for fatigue, nervousness, even a cure for morphine addiction and alcoholism.[16] When John Pemberton formulated the original receipt for Coca-Cola, it contained the active alcaloid of cocaine, hence the name of the beverage. Coca also found its use as anesthetic in surgery, which remains one of its only enduring legal uses.[17] The popularity of cocaine peaked in the early 20th century when there was a re-examination of many patent medicines in the United States. Medical research began to document cases of dependency and psychological disturbances linked to cocaine abuse. The public's acceptance of cocaine gradually faded and it was banned in the United States under the Harrison Act in 1914. The demand stayed low until the late 1970s when the marihuana generation in the United States re-discovered cocaine and the story of the modern day illicit drug industry in the Americas began.

Contrary to manufacturing of legal products, in the cocaine industry the value added at each stage of its manufacturing process is in direct proportion to the amount of risk attendant upon that stage. In consequence, the value added to cocaine increases substantially at each stage of its manufacture commensurate with the risks involved in that stage and does not correspond to factor opportunity costs. In other words, the high value added in cocaine industry is due to its illegal nature and the risks this imposes. As a result, farmers in coca producing countries such as Bolivia or Peru gain a minor share of the final sales price because their risk is comparatively low. The price increase takes place at the marketing and distribution end of the business, in the United States or in Europe, where the risks are much greater.

Since the manufacturing process is relatively footloose and free of being tied to any one location within the coca growing areas of the Andes, this stage of the industry tends to gravitate toward the location presenting the lowest risk for traffickers. And this is where Colombia's story as the birthplace of modern day illicit drug industry begins.

1.2. Colombia: Birthplace of Modern Illicit Drug Trafficking Industry

In the early stages of a trans-american cocaine-smuggling industry, Colombia offered a set of conditions which, (a) minimized the cocaine industry's risks, (b) attracted the refining stage of cocaine, (c) allowed Colombians to control the marketing of coca leaves in Bolivia and Peru, and (d) involved them in the United States cocaine market. In a way, Colombia developed momentarily an absolute advantage in those aspects of the industry and provided ideal circumstance for Colombian traffickers to seize the opportunity when the cocaine consumption boomed in the 1960s and 1970s.

Geography is often mentioned as a key asset when analyzing Colombia's comparative advantage. The country is strategically located between the coca-producing nations of Peru and Bolivia and the routes through the Caribbean and Central America that lead to the lucrative

[15] Paul Gootenberg, *Cocaine: Global Histories* (Abingdon-on-Thames: Routledge, 1999), 84.
[16] McNicoll, *Drug Trafficking,* 7.
[17] Ibid*,* 9.

North American and European markets.[18] However, MacDonald identifies additional factors underlining Colombia's critical role in the illicit drug trafficking: (1) Colombia's vast forests allowing for easy concealment of laboratories and landing strips; (2) Colombians' entrepreneurial skills; and (3) the presence of a numerous Colombian community in the United States, providing the basis for developing proper distribution infrastructure. Moreover, MacDonald suggests that these factors were able to interact as a package, concluding that "other nations have some of these factors, but not all, the most important being the lack of geopolitical location. Only Mexico in Latin America may come close."[19] Whynes concured stating that the geographical location of Colombia as a point of infiltration by air and sea into the USA was, and still remains, ideal.[20] From the onset of the transcontinental illicit drug trafficking the difference between the production costs and the wholesale prices obtained in the end market is in thousands of per cents. Also, cocaine has a very high value per unit of volume and weight. Therefore, neither physical distance between sources of supply and the end market nor transportation costs are major considerations in determining the locus of its manufacture.

The geopolitical argument has its merits, but it does not adequately explain why the refining process was lodged mainly in Colombia, due to its relative simplicity it could have been located just as easily near its raw material sources. This argument also fails to explain why it was Colombians who controlled the marketing and transportation of both coca paste and cocaine. Colombia is not a primary point for transshipment of cocaine as is true of some of the countries in Central America and the Caribbean. Cocaine differs from marijuana in terms of shipping logistics, since the latter is bulky to transport, making Colombia less suitable for this purpose than the Caribbean, Central America and Mexico providing closer proximity and better access to the U.S. market.

Gradual delegitimation of its governmental system, which resulted in a weakening of the state and its institutions, was Colombia's principal comparative advantage as location for illicit drug production. Dramatic changes marked Colombian society throughout the 20th century. As the country evolved from a traditional rural society into an urban economy based on industry and services that required new institutions and a new system of labor relations in order to function without conflict, society lagged in meeting the new demands being placed upon it and failed to develop the institutions needed fast enough to adjust to the changing conditions, which resulted in profound institutional crisis.[21]

Colombia's traditional political system based on political parties controlled by agricultural economic elites, whose own power was based on political and economic control of the peasants working on their haciendas, failed to accommodate the new groups which were coming into existence. The existing elites struggled to keep their power and maintain the *status*

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[18] Scott MacDonald, *Dancing on a Volcano: The Latin American Drug Trade* (New York, NY: Praeger Publishers, 1988), 28.
[19] Ibid, 29.
[20] David Whynes, "The Colombian Cocaine Trade and the 'War on Drugs'," in *The Colombian Economy: Issues of Trade and Development*, ed. Alvin Cohen and Frank Gunter (Boulder, CO: Westview Press, 1992), 329–352.
[21] Francisco Leal Buitrago, *Estado y política en Colombia* (Bogotá, Colombia: Siglo Veintiuno Editores, 1984); Francisco Leal Buitrago. "El sistema político del clientelismo." *Análisis Político* 8 (September-December 1989): 8-32; Francisco Leal Buitrago and León Zamosc, *Al filo del caos: Crisis política en la Colombia de los aňos 80* (Bogotá, Colombia: Tercer Mundo Editores, 1990); Salomón Kalmanovitz, *Economía y nación: Una breve historia de Colombia* (Bogotá, Colombia: Siglo XXI Editores, 1988).

quo as the society gradually modernized. They only managed to retain control at a cost of gradual delegitimation of regime and high levels of violence.[22]

Colombia has a long history of political violence, in which the period known as *La Violencia* represents a particularly gloomy chapter as undeclared civil war which extended from the late 1940s to the early 1960s infamous for its widespread violence, extreme cruelty, and wanton killings (estimated at 2-3% of the country's population).[23] *La Violencia* saw both Liberal and Conservative parties supporting their own guerrilla groups, with the Conservatives using their current power status by augmenting their forces with both the police and the army in fighting the Liberal-supported guerrillas. Origins of the conflict were tied to differences among the ruling elites over the adoption and implementation of measures introducing more progressive labor relations and reform land tenancy practices. Liberal governments sponsored these measures during their tenures 1930 – 1946. However, the post World War II period saw substantial changes in Colombian society such as growing urbanization, industrialization, and accompanying infrastructure development. These changes tended to undermine the power of then ruling Conservative hegemony and strength of the traditional rural interests. It was in this climate that *La Violencia* erupted. In 1953, a military government was installed with an implicit mandate to end the exhausting violence.

By 1958 the changed environment not only weakened the traditional rural interests, it also served to blur the differences between the two party elites, who also feared losing power to the military. These fears led the parties to establish the National Front, an agreement securing rotation in power, division of most government positions between the two parties and alternation of the the presidency, a deal which lasted some 16 years. This agreement diminished violence as a tactic in the power struggle between the two main parties, at the same time this power monopoly excluded all other parties who held different political views. The military government of the 1950s, granted amnesty to the guerrillas in exchange for giving up arms. However, the newly introduced exclusionary political system led some to continue their battle once they found legitimate avenues to power blocked. By the mid-1960s, organized guerrilla organizations took control of isolated country regions where the power of the central government had been weak and they had established quasi-governmental entities taking over many of the state functions. They collected contributions from local peasants, protection payments from large landlords, and provided health, education, and security to the peasantry. Over time, these movements took more class-oriented stance, providing the base from which Marxist guerrillas gradually emerged.

Besides being exclusionary, this political system also developed clientelistic practices in which politicians became intermediaries between the citizens and the government, exchanging public services and employment for votes. With the Colombian economy grewing more complex, the government assumed more functions, while at the same time, it became less effective in fulfilling them and inefficiency began to snowball. Government bureaucracies becoming more inefficient they also became less accountable and less responsive to the public they were supposed to serve and corruption in both the private and public sectors increased.

[22] Francisco Thoumi, "Why the Psychoactive Industry Grew in Colombia," *Journal of Interamerican Studies and World Affairs* 34, no. 3 (Autumn, 1992): 47.

The delegitimation of the state produced a widening gap between the written laws and socially acceptable behavior and the illicit economy expanded greatly.

The process of delegitimizing and weakening of the state was not unique in the Americas, but in comparing the Colombian experience with that of those other countries there are two important differences: the delegitimation process began earlier in Colombia and it had been characterized by a much higher level of violence than witnessed in other Andean countries. *La Violencia* and the delegitimation of government left legacies which not only permitted, but encouraged the development of the cocaine industry. Although the state had never had a strong presence in those areas of country where it gradually lost control, the guerrillas demonstrated that the central goverment could not assert control in those areas even if it desired to do so. Morevoer, the experience of *La Violencia* diminished the value on human life and its legacies was that Colombians are quick to resort to violence in dealing with conflict, which turns out to be a very practical attitude in a high-profit, high-risk, and conflict-prone enterprise. In the 1970s, willingness to resort to excessive violence served the Colombians in dealing with their Bolivian and Peruvian competitors, particularly during early stages of the illicit drug industry's development. Delegitimation of the state authority contributed to Colombia's advantage over other states in hosting the illicit drug industry in yet other ways.

Colombia has a long tradition of illegal goods import, which came particularly useful when the demand for cocaine in the U.S. offered a new incentive for local smugglers. In the mid-1950s the import of many contraband consumer goods was practically institutionalized by developments like the creation of free zones to set up export-assembly plants and to store imports while import licensing and nationalization processes were concluded, have also facilitated contraband which could be brought into these zones and then smuggled out of them. The institutionalization gave contraband trade legitimacy helped to destroy any social stigma that might once have been attached to it. Similarly important is that Colombia also had a history of export contraband. Throughout time, it smuggled manufactured products and livestock out of Colombia into Venezuela and Ecuador. Coffee had been smuggled out in order to bypass the quotas imposed by the International Coffee Agreement. Workers in government mines would steal the emeralds and sell them to smugglers. In some case, the smugglers themselves developed illegal, wildcat mining organizations. This experience in smuggling contraband could later be applied to the export of narcotics since it provided the know-how of selling in the international black markets. Many emerald smugglers became involved in exporting marijuana in the mid-1970s and later on they went on to became cocaine exporters.

The contraband trade helped to establish links between Colombian and foreign smugglers, it also enabled Colombians to gain experience in money laundering and other shady transactions involving international capital. Colombia had been the only country in the region which had exchange controls and tariff restrictions from 1931 to mid-1991. in 1967, foreign exchange and import-licensing control systems were tightened. Together with high tariffs on imports, these provided strong incentives for the development of a black market in foreign exchange, originally supplied by the export of emeralds, worker remittances, tourism, and other contraband exports.

The foreign exchange black market provided the money laundering expertise as well as the channels for drug profits and capital to be brought into the country. Colombia was not the only Andean country that experience a government delegitimation process. While the crisis in

the Colombian state was evident by the late 1940s, it did not materialize in Peru and Bolivia until the 1970s and 1980s. Therefore, Colombians engaged in the illicit drug smuggling gained a head start and competitive advantage over their neighbors.

Given the weak presence of the national government many of Colombia's geographically isolated regions were forced to become fairly self-sufficient and the set up of facilities to manufacture and refine illegal psychoactive drugs offered an opportunity in this regard. Moreover, Colombia's large size, relative to some smaller countries in Central American and the Caribbean, attracted illicit entrepreneurs for two reasons: the larger the territory, the easier it is to avoid detection; and because bribery of local officials, often an integral part of illegal enterprise, is cheaper and less risky.

Colombian capitalism has always operated on the expectation of very high, short-term profits, with an entrepreneurial class based on production-speculation. That is, who invested little in long-term capital equipment, focused its activities on trade, expected a quick turnover and high, short-term profits.[24] In the 19th century, several economic booms combined with substantial obstacles to internal transportation produced extremely segmented markets with widely differentiated prices, which favored and fueled speculation. After World War II, as modernization and structural changes in the economy took place, some entrepreneurs began to invest into longer-term and more stable economic activities, but many continued to pursue their traditional rent-seeking path. During the 1970s, liberalization of the capital market under the Pastrana administration (1970–74), strengthened by the López goverment (1974–78), and the coffee boom (1975–78) reinforced the production – speculation mentality. Capital market liberalization led to financial speculations, high short-term returns, and a series of major bankruptcies in the 1980s. The coffee boom provided both very high profits and the expectation of high gains.

Last, but not least, important factor had been a large legal and illegal Colombian migration to the United States. Emigrant groups in major urban areas provided an excellent base from which to recruit and organize illegal exports distribution network. The large emigration from Colombia preceded that from the other Andean countries, contributing to the Colombian headstart and providing another comparative advantage.

In summary, the combination of these factors gave Colombia, and those of its citizens engaged in illicit drug traffickig, an overall advantage in the manufacture and international distribution of narcotics, most importantly cocaine. The widespread use and acceptance of violence in Colombian society notionally provided drug traffickers with effective tactics to deal with opponents and they were indeed unusually quick to use force in eliminating competitors in this trade, which enabled them early on to control the purchase of the raw material as well as the channels for distribution of the final products in the United States.

1.3. The Illicit Drug Industry and Its Entrepreneurs

The increase in cultivation and drug production during the 1980s can be to some extent attributed to the historical weakness of the states in the Andean region, which often failed in their atempts to stop illegal activity and the quality of life declined as drug traffickers

[24] José Antonio Ocampo, *Colombia y la economía mundial 1830-1910* (Bogotá, Colombia: Siglo Veintiuno Editores, 1984), 61.

established themselves in the rural society. The Colombian experience shows how the remote and increasingly ineffective government has been unable to deal with spiraling poverty and crime and how it failed to integrate the lower classes in the countryside into society. During this period almost half of the Colombians lived in poverty and most of rural areas did not have adequate schools or medical facilities.[25] Unsuccessful land reforms in Colombia, Peru and Bolivia prevented improvements in the rural economy and thwarted further development. Structural adjustment programs initiated in the 1980s to reduce debt only exacerbating the problem of rural poverty. After the oil crisis of the 1970s, the cuts in social spending were severe, which negatively impacted on the rural and urban poor. Budget cuts occurred mainly in social welfare, basic foods subsidies and other essential commodities and services.[26] Drug traffickers managed to take advantage of these actions and manipulate outcomes to their benefit. Drug traffickers established a foothold as informal and illegal activities flourished while the rural economy deteriorated. Hyperinflation, unemployment and declining living standards, and unemployment forced many to seek alternative ways of earning an income. Most people then became involved with the informal economy, legal or illegal. Drug traffickers offered easy money to alleviate the effects of declining living standards in several ways. First, earnings from the drug trade were paid in U.S. dollars and were not subject to the hyperinflation afflicting local currencies.[27] Secondly, the drug trafficking was a booming industry with the demand for marijuana and cocaine growing to the point that by 1987 cocaine exports were equivalent to 10 – 20% of Colombia's legal exports, 25 – 30% of Peru's, and 50 – 100% of Bolivia's.[28] Many people were either coerced into compliance or they were simply offered employment as drug traffickers were able to provide much desired source of income. In the countryside, participation in the drug trade became more attractive alternative to the formal economy, which could not provide adequate income. Economic underdevelopment enhanced the rationality of narcotics trafficking, which had a softening effect alleviating the effects of extreme poverty in rural areas caused by the spiraling national debt and deteriorating standards of living.

Economic incentives aside, drug trafficking has also been successful because of the states' inability to effectively enforce the rule of law. Rural bandits, guerrillas and smuggling have all existed in Colombia, Bolivia and Peru for decades, yet these states could not eliminate the social conditions that enabled crime, or control the influence of organized criminal activity. In 1980s, guerrilla groups became inherent features of these countries. In Colombia, FARC and 14 M-19 increased their anti-govemment operations.[29] In Peru, Sendero Luminoso grew in strength in the 1980s until an all-out war was declared by President Fernando Belaunde.[30] In both countries, the battling military and guerrilla groups turned the countryside into a warzone.

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[25] Harvey F Kline, "Colombia: The Struggle Between Traditional 'Stability' and New Visions," in *Latin American Politics and Development 3rd ed*., ed. Howard J. Wiarda and Harvey F. Kline (Boulder, Colorado: Westview Press, 1990), 254.

[26]Roberto Frenkel and Guillermo O'Donnell, "The 'Stabilization Programs' of the International Monetary Fund and their Internal Impacts," in *Money Doctors, Foreign Debts, and Economic Reforms in Latin America; from the 1890s to the present,* ed. Paul Drake (Wilmington, Delaware: Scholarly Resources, 1994), 165.

[27] Louise I. Shelley, "Transnational Organized Crime: An Imminent Threat to the Nation-State?" *Journal of International Affairs* 48, no. 2 (Winter 1995): 481.

[28] Rensselaer W. Lee III, "Dimensions of the South American Cocaine Industry," *Journal of Interamerican Studies* 30, no. 2 and 3 (Summer/Fall 1988): 89.

[29] Kline, "Colombia," 248–249.

[30] Thomas E. Skidmore and Peter H. Smith, *Modem Latin America 4th ed*. (New York, NY: Oxford University Press, 1997), 223.

In these areas of prevalent poverty and crime the possibility of the state losing total control was inevitable. During the 1980s, the drug traffickers filled the void left by the state and established an extensive group of coca growers and producers. Poverty in rural areas provided traffickers with the opportunity for a deal of convenience with segments of the peasantry, while the weak law enforcement allowed the traffickers to become entrenched in the local economy.

Stronger position in the countryside allowed the drug traffickers to increase the scope of production and distribution of cocaine. Economic problems in the 1980s pushed legal industries to layoff workers, in these people the drug trade later found a pool of loyal and eager workers who were willing to grow coca. For instance, in Bolivia some of the displaced miners in the late 1970s left for the Chapare region, where the number of settlers increased by 40,000.[31] Many of the newly arrived settlers became involved in the informal economy, more hectares of land were devoted to coca and marijuana cultivation, which resulted in more coca leaves available for refining. Similar scenario took place in Peru. Growth in coca-leaf production lowered the price of street cocaine thus making it affordable to more people. Increase in sales stimulated demand for coca leaves and the cycle continued for years, generating larger profits than the formal economy. Growing demand for coca leaves would stimulate further economically motivated immigration until the number of settlers in the Chapare region reached 200,000 by 1987.[32]

With coca leaf yields growing, the price of street cocaine decreased with positive consequences for the drug trafficking. Cocaine consumption remained low until the 1970s when freebasing cocaine became popular. Freebasing consists of separating hydrochloride from the cocaine and then dissolving the cocaine in a solvent like ether, in which the cocaine was crystallized. Due to its lower melting point the free base cocaine can be smoked giving the user a faster and more potent intoxication.[33] Even then the practice remained limited to a small percentage of the general population and subsequent profits were not even close to the profits of the early and mid 1980s. Nevertheless, freebasing showed that a viable market existed in the U.S. for cocaine as the number of freebasers reached about 4 million by the end of 1970s.[34] Still the cost held demand low and crisis occurred as it failed to reap huge dividends.

Development of crack cocaine combined with decrease in the street prices had almost immediate impact on the market. Crack offered both advantages of easily manufactured and strongly addictive product and potential for high revenues. As more coca leaves were available for processing cocaine prices dropped, which allowed for access to a larger market. By 1988 prices for a kilo of cocaine decreased from $47,000 to $70,000 to a range of $11,000 to $34,000.[35] Another positive feature was the relative simplicity of crack production. Crack could be made virtually in any place with access to boiling water, cocaine, an additive such as Novocain, baking soda and ice water. Furthermore, refining could be outsourced, which would also make any attempts at detection and disruption more difficult. Instead of creating the final product in South America small amounts of raw cocaine hydrochloride could be smuggled into

[31] Fernando Argafiaras Garcia, "The Drug War at the Supply End: The Case of Bolivia," *Latin American Perspectives* 24, no. 5 (September 1997): 62.
[32] Ibid.
[33] Henry H. Brownstein, *The Rise and Fall of a Violent Crime Wave* (Guilderland, NY: Harrow and Heston, 1996), 34.
[34] Ibid.
[35] Ibid, 33.

a country and distributed to thousands of smaller laboratories. This innovation transformed the illicit drug industry because shipping of smaller quantities to larger number of cells for cocaine processing decreased the amount of losses in the event of an arrest and at the same time it expanded the distribution network over a wider area.

In the 1980s hardly any commodity could compete with profits from cocaine sales, particularly crack, which broke down high quality cocaine into smaller amounts and could be sold at a price from $2 to $5. Now, 4 ounces of street cocaine could serve over 1,000 crack users.[36] Low prices made crack accessible to all segments of society, it crossed economic barriers and became available to anyone. Given the highly addictive nature of crack, there was a solid prospect for high volume sales. Eventually, it became available almost everywhere, it appeared first in Los Angeles and New York and then found its way through smaller cities and towns to inner city neighborhoods. The combination of availability, low price and high profit margin helped make crack cocaine more lucrative commodity than ever.

Now the drug traffickers had a profitable commodity for sale and lucrative markets available, but they needed a network to provide the critically important link between producers and consumers. Colombian smugglers demonstrated the necessary wits and talents in undertaking that task. Historically, Colombian traffickers supplied narcotics to organizations like Cosa Nostra or Cuban and Mexican gangs.[37] In the 1980s, the profitability of cocaine motivated Colombian traffickers to branch out and set up their own smuggling and distribution networks.[38] In the end they managed to gain access to all corners of the globe and have also been able to spread drug trafficking responsibilities to local groups and organizations.

Colombian smugglers‘ capabilities later expanded with the increase in demand. Trafficking originally began on a limited scale, with individual smugglers moving small amounts of cocaine into the United States. But the larger demand for cocaine forced a development of smuggling methods. The Colombian trafficking enterprises began as a way to consolidate transportation of cocaine. They established an insurance system that used different forms of transport to deliver cocaine. Pablo Escobar pioneered the insurance system in the Colombian town of Medellín. Suppliers would pay a premium of some 10% of the U.S. wholesale cocaine price; if a dealer’s shipment was seized, Escobar would replace it at the purchase price of cocaine in Colombia.[39] Chance of seizure was around 10%, which resulted in enormous profits from cocaine smuggling for Escobar and his fellow traffickers.[40]

Taking advantage of Colombia’s geographical significance, its traffickers were able to create international smuggling networks through bribery and extortion. The weakness of the Colombian government and its law enforcement was easily exploited through intimidation and bribery and the power of traffickers expanded rapidly. Illicit entrepreneurs like Escobar would bribe law enforcement officers, judges, politicians, bankers, the military, in other words anyone who could intervene in their profitable trade. Throughout the 1980s illicit smuggling grew substantially and through astronomical revenues drug lords were able to influence those in positions of authority and secure their own powers and influence. Massive corruption and

[36] Brownstein, *The Rise and Fall of a Violent Crime Wave*, 35.
[37] Shelley, “Transnational Organized Crime,“ 479.
[38] Ibid.
[39] Clawson, *The Andean Cocaine Industry*, 38.
[40] Ibid.

money laundering became integral to the business operation. Violent enforcement became commonplace by the mid-1980s as death squads were hired to protect the interests of drug traffickers. Groups like the right-wing *Muerte a Secuestradores* (MAS) protected drug dealers from local guerrilla groups and eliminated those who stood in their way.[41] For those who refused bribes, the punishment was severe. The most common retribution was murdering the individual or his family members and friends. The murder of presidential candidate Senator Luis Carlos Galan in 1989 served as a notice to all those who opposed the drug traffickers. Galan had been the leading candidate in the 1990 presidential polls and called for tougher sanctions on drug traffickers.[42] His murder was a clear message to others who might attempt to intend to supress the drug trade.

The vast profits of drug trafficking had to be laundered and legitimized to ensure there would be resources available to maintain the smuggling enterprise, to bribe officials and to show to the rural poor the economic benefit of growing coca. The economic uncertainty impacting Latin America during the debt crisis of the early 1980s created conditions that allowed money-laundering to become so prevalent. When Mexico defaulted on its foreign loan payments in August 1982, foreign investment in the region terminated immediately.[43] Many other governments were also caught between paying debt obligations and facing declining export earnings. To cover interest rate payments, countries had to pay the equivalent of over 5% of their GDP.[44] This economic hardship also affected private institutions such as banks and other corporations in Latin America. As hyperinflation set in, numerous private institutions desired an influx of liquid assets the drug traffickers were ready to provide. In Colombia illicit trafficking profits were often diverted into a professional soccer teams and political parties.[45] The easy cash drug traffickers provided was often accepted without any questions because companies were desperate for any source of investment regardless of its origin. Since investments usually came in American dollar, they were even more popular because it was more stable than any of the Latin American currencies. However money-laundering had not been limited to South American countries. Estimates mentoned that as many as two dozen banks in the Miami were suspected of involvement with laundering drug profits during the 1980s.[46] The relative stability of the American banking system, their substantial resources and Miami's Latin American presence were all sources of South Florida's attraction for ilegitimate banking. Miami alone received some $5-6 billion in flight capital in 1982 from various Latin American countries escaping the regional economic uncertainty initiated by Mexico's declaration of bankruptcy.[47] As businesses and governments directed their investments to Miami, the banking industry willingly accommodated these large inflows of cash without any reservations.

The so-called Medellín and Cali drug trafficking organizations became widely recognized entities in public perception due to high profile of their activities in the 1980s and attention paid to them by mass media, law enforcement and national governments across the U.S. and Americas throughout the 1980s and early 1990s. The term cartel became the popular

[41] Kline, "Colombia," 251.
[42] Ibid, 250.
[43] Skidmore, *Modern Latin America*, 254.
[44] Ibid, 254.
[45] Kline, "Colombia," 251.
[46] Anthony P. Maingot, "Laundering Drug Profits: Miami and Caribbean Tax Havens," *Journal of Interamerican Studies* 30, no. 2 and 3 (Summer/Fall 1988): 174.
[47] Ibid, 177.

public label despite the fact that the organization had limited capability to dictate cocaine prices. Semantic inconsistencies aside, the Medellín and Cali-based traffickers in illicit narcotics were the founding fathers of the modern day illicit drug industry in the Americas. The Medellín and Cali kingpins ended up overseeing an extensive international network of cocaine refinement, production, transportation, wholesale distribution, and money laundering operations.

In the late 1960s, when the marihuana generation in the U.S. discovered cocaine, Mexican drug trafficking organizations were unable to satisfy the new demand because they lacked connection to the coca growers in Bolivia and Peru strong enough to establish necessary logistics. Thus, from the mid-1970s until the early 1990s, Mexicans with their unique position in the neighborhood of the largest world market and highest demand for narcotics had to bow before Colombian traffickers headed by Pablo Escobar in Medellín and the Rodriguez brothers in Cali.

By the mid-1990s Mexican drug traffickers were back in the position of dominant suppliers to the U.S. market controlling the flow of both marijuana and cocaine into the country. Moreover, their former bosses in Colombia were either dead or in jail, which enabled Mexicans to strengthen their position on the supply side of the business, too. By the mid-1990s Mexicans were on top of the drug industry in the Americas controlling import, distribution and sales in the U.S. market.[48] A situation which remains virtually unchanged to date.

[48] United Nations Office on Drugs and Crime, *World Drug Report 2010* (New York: UNODC, 2010), 237. https://www.unodc.org/documents/wdr/WDR_2010/World_Drug_Report_2010_lo-res.pdf.

2. THE COMMODITY, THE ENTERPRISE AND THE BUSINESS MODEL

2.1. Structure and Process of Cocaine Trafficking

The structure of cocaine's life cycle is fairly simple. At the beginning there is coca cultivation and refining; smuggling and distribution brings cocaine to the consumer; consumption and profit laundering are the final components of the cycle.

Cultivation

Cocaine hydrochloride begins its journey to millions of consumers around the globe at the foothills of the Andes, where the home of the coca plant can be found in extensive cultivation areas extending over parts of Colombia, Ecuador, Peru, Brazil and Bolivia. The plant is exklusive to that part of the world, giving the Andean countries a monopoly on supply. The Upper Huallaga Valley in Peru is the geographic center of coca production.

Growing coca plants is a labor intensive process that requires a large amount of people. Aside from the elementary fanning jobs, coca cultivation needs individuals to protect the fields, prevent detection, ship coca leaves to refineries and manage the whole operation. Coca growers recruit from among the poor rural population. Hardly any members of the lowest level of the drug regime move beyond fanner to the higher, well-paid levels in the smuggling networks. Despite the vital role in the initial stages of cocaine production, few profits trickle down to the farmers in the Andean rural areas.

Compared to some other natural commodities such as oil, coca production has not been able to spur regional development or improve economic status of indigenous population. The Huallaga Valley remains very poor, despite millions of USD beeing earned from the area's crops. Similarly, cocaine production has little effect on the overall GDP of these countries. The portion of the narcodollars returning to Peru and Bolivia is too small for this money to create spin-off effects in the economy. Some estimates suggest that for every USD earned in the drug trade, 10 to 20 cents return to wholesalers and traffickers in transit countries, about 1 cent returns to coca growers in the Andes.[49] In comparison to oil production, the regional economic presence is minimal. Among the Persian Gulf countries, oil profits represent substantial part of the national income. Instead, revenue from the cocaine trafficking is generated through the smuggling, distribution and sales of the commodity, not the initial stages of product development. In those later stages value is added and prices increase. Once laundered through legal enterprises the majority of revenues stays in the hands of the few top level traffickers. Regardless of the profit sharing scheme, traffickers are able to exploit existing poverty in the countryside, keeping operational costs low.

Refining

As for industrial production, the manufacturing process of cocaine hydrochloride, or C17H21NO4, is not capital-intensive and uses a very simple technology. Among the many varieties on the coca plant the alkaloid content of the leaves varies significantly, with the Bolivian and Peruvian type yielding a substantially greater amount of cocaine than the rest. In

[49] United Nations Office on Drugs and Crime, *World Drug Report 2010*, 18; Organization of American States, "The Drug Problem in the Americas: Studies. The Economics of Drug Trafficking," 2013, 5. http://www.cicad.oas.org/Main/policy/informeDrogas2013/laEconomicaNarcotrafico_ENG.pdf.

order to release the alkaloid content, the coca leaves are placed in a plastic bag and mixed with sodium carbonate. The mix is then transferred to a container together with gasoline and sulfuric acid dissolved in the water. Some 12 hours later, the coca paste is obtained by pressing the contents of the container. This paste is later converted into coca base through a process that involving ammonia, potassium permanganate and some filters to remove impurities. Chloridic acid, ether and acetone are then applied to the base in a process that requires only some processing to transform it into cocaine. In terms of necessary workforce, chemists are one group of the skilled freelancers necessary in the refining process. There is also some unskilled labor to provide most of the assistance in mixing coca leaves with chemicals, unpacking bundles of leaves and packaging cocaine hydrchloride.

The coca plant cultivation is highly responsive to such factors as location and climate. Due to the bulk and volume of coca leaves in their natural state it is beneficial to process them into paste as close to the source as possible. Once the paste is obtained, it is easy to transport and can be then manufactured into cocaine anywhere. In consequence, the manufacturing stage takes on the characteristics of a footloose industry not tied to any particular location. Refining is the first value-added stage where the price of the commodity rises considerably.

Colombia is the largest producer of the world's cocaine. Historically, the Colombian traffickers have been successful in bribing state and law enforcement officials to prevent interference from the government in executing their illicit entrepreneurial activities. The refineries vary from small scale operations to large ones. These laboratories are generally located in the remote rain forest areas and eastern lowlands of Colombia and supplied by coca from Peru and Bolivia through the dense forest or by small aircraft. Installation of US-built radar systems at Leticia and Araracuara in Colombia, Lago in Ecuador, and Yurimaguas in Peru later motivated traffickers to increase in-country procurement of intermediate cocaine products.[50] Shortening supply lines and widening the range of refineries consequently reduced the risk of detection and cost of transporting leaves to the refineries. Besided reorganizing the refinery structure, traffickers responded to law enforcement's attempts to reduce purchase of essential chemicals by substituting alcohol for gasoline, which actually increased the extraction rate of cocaine base. They also intorduced a recycling program that re-uses chemicals and reduces waste. At this point, when the raw material is transformed into a nearly finished product, the drug traffickers force the price of cocaine upwards to compensate for potential losses.

Smuggling, Distribution and Consumption

The most critical link in the drug smuggling enterprise is the ability of traffickers to deliver their product to the consumer. At his stage the highest value is added to cocaine's price. The cost of smuggling and corrupting state and law enforcement officials is transferred over into the cost of the good, making cocaine extremely valuable. Many networks operating today are a legacy of the 1980s cocaine boom. The explosion in coca demand stimulated re-organization of trafficking and distribution networks. In the early days, cocaine used to be smuggled in smaller quantities into transit and destination countries often by individuals or small-scale transport.[51] With the steep rise in demand, aircrafts and other large capacity vehicles

[50] Clawson, *The Andean Cocaine Industry*, 18.
[51] Peter S. Green, "The Ever-Changing Logistics of Drug Smuggling," *The Wall Street Journal*,

capable of carrying hundreds of kilograms of cocaine at once became the standard mode of transport. Nowadays, smugglers use diversity of creative, flexible and relatively safe methods to avoid detection. Illicit trafficking requires the coordination of various related activities, such as land, air and sea transport; aircraft use and maintenance; cargo loading, unloading and storage; delivery of bribes to appropriate government and law enforcement officials in transit countries and lately also intensive collaboration with trafficking organizations in transit countries.

The inflow of narcotics in the Americas moves from the South to the North, passing through Central America, or the Caribbean, into the U.S. and other end-user countries. In contrast, the organization of smuggling networks is not defined by proximity to the consumer markets. Instead, there is strong preference for areas with minimal detection and disruption risks. New Orleans, for instance, is an important port of entry into the U.S. market despite its very limited market share. Quite often Mexican traffickers transport cocaine into the United States through a large variety of methods ranging from individual carriers to trucking and aircraft delivery. Particularly in land-based commercial trucking they are able to exploit the high volume of traffic across the border and use it to their advantage in avoiding detection. The sheer number of both vehicles and individuals crossing the border on daily basis make it impossible to thoroughly search everyone and everything. During the 1980s, Central America became a major drug transit route. Officials had been generously paid and bribed, many actively participated in the trade. In times of General Noriega virtually the whole of Panama became complicit.

Experience shows there are no shortages in smuggling destinations or methods. Drugs sent through the Caribbean usually travel on smaller speed boats, sometimes even on semi-submersibles and submarines.[52] The smaller faster drug-cargo carrying vessels leave the northern coast of Colombia, keeping close to the Venezuelan coastline, heading to the Dominican Republic, Haiti or Puerto Rico, or other islands until they reach the United States. One important advantage speed boats offer is to travel along the island chain and to blend in with other vessels, minimizing the chance for detection. Given its geographical proximity to the United States, Cuba has been an important spot in the Caribbean for traffickers. In the 1980s, the business ties between the Medellín drug bosses and high ranking officials in the Cuban government developed to the point where narcotics were smuggled through the island to the United States.[53] Cuba remains important today by providing fuel for boats, landing strips for aircraft and accommodations for smugglers. Once they pass through the Caribbean, narcotics arrive to Miami or New York City, from here they are sent to distribution centers in major metropolitan centers across the U.S. and Canada.

In contrast, narcotics sent through Central America rely mostly on land and air transport. Often times aircrafts drop bales of partially processed cocaine in southern Mexico, which are retireved by local traffickers and prepared for further land transport. Most of narcotics enter the United States in trucks, or other private vehicles, at major ports such as San Diego, California, or El Paso, Texas. Cocaine destined for European markets is usually sent on freighter ships in large containers hidden among other legal cargo. Proper screening of maritime containers for

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https://www.wsj.com/ad/cocainenomics.

[52] United Nations Office on Drugs and Crime, *World Drug Report 2010*, 74.

[53] Clawson, *The Andean Cocaine Industry*, 44.

illicit cargo is a time-consuming process, which is another factor contributing to successes of this transporation method. On the other hand, the larger distance to Europe and smaller market share make it less attractive for the drug traffickers since they cannot exercise as much control over smuggling and distribution operations. Moreover, Colombians are less eager to engage in trafficking across Europe because of difficulties they face cracking the domestic markets, they are also easier targets for European law enforcement agencies. In response to challenges in their operational environment the traffickers have formed strategic alliances with Italian criminal groups to distribute cocaine across Europe.[54]

Once delivered to the United States territory, cocaine is sent to major metropolitan centers for further distribution. Usually, within each city there are a number of distribution cells that operate as networks. The distribution cells are coordinated by managers either in Colombia or Mexico who issue sales coordinating orders and ensure profits are handled properly. Major bulk cocaine distribution centers in the United States include southern California, Los Angeles and San Diego, southern Florida, primarily Miami, Phoenix, Arizona, southern Texas and New York City. From the main distribution cells in these large cities, narcotics move to lower level distribution groups in the U.S. and Canada. In the end, cocaine reaches its consumer after passing through the chain of local distribution points. Street gangs in particular have been effective in spreading cocaine across the country and making it available to consumers. In the United States, locally operating Cuban, Dominican, Haitian, Jamaican, Mexican and Puerto Rican gangs and criminal groups controlled cocaine and crack sales at the retail level.[55]

Financing

The profits from the drugs sales are collected by cell managers from corresponding cities and towns and consolidated for direct transfer to Mexico or Colombia or other laundering sites.[56] Money laundering is the critical nexus between the financier, the seller and the market. This role has been filled by banks, particularly in Miami and Latin America. Banks can blur the boundaries between the legitimate and illegitimate businesses by creating substantial gray areas in the economy. While sales are often in US dollars, the money is usually converted to another currency because the American and Canadian governments have cracked down on money laundering. In practice it is a complex financial process involving numerous corporations, banks, and individuals. Cash from cocaine sales re-enters Colombia and Mexico through various channels. Law enforcement agencies have responded by imposing high tariffs on American money entering Colombia to diminish the availability of US dollars. In turn, traffickers ordered American dollars into Venezuela, exchanging them for Venezuelan bolivars, then smuggling the cash into Colombia.[57] Money orders, drafts and other negotiable securities are among many other ways of laundering the profits. Houses have been purchased with bags of cash and casinos have been used to launder profits. With the technological advancement of internet access, traffickers have been able to layer their deposits across a number of different countries, in several financial institutions, masking the origin and final destination for sums transferred. For large scale international money laundering, more complex and detailed

[54] Clawson, *The Andean Cocaine Industry*, 65.
[55] United Nations Office on Drugs and Crime, *World Drug Report 2010*, 79.
[56] Ibid.
[57] Douglas Hernandez, "Is War Between Colombia and Venezuela Inevitable?" *Colombia Reports*, September 27, 2018, https://colombiareports.com/is-war-between-colombia-and-venezuela-inevitable/.

processes are required. Front companies often have vital importance in the schemes. Falsified export documentation, lading bills, or invoices for goods shipped out of Colombia and to the United States are used to justify large payments sent to Mexico and Colombia. Price of gold, emeralds and other precious stones in general are difficult to estimate accurately and therefore lend themselves to invoice manipulation.

Large scale laundering operations involving millions of US dollars require the cooperation, or rather co-optation, of lawyers, bankers, businesses and even politicians. Sophisticated money laundering schemes draw in a number of legitimate individuals and companies since profits from narcotics sales can be channeled through businesses unknowingly. However, compliance has been prevalent because the skilled *ad hoc* labor, such as lawyers, bankers, accountants, gains generous compensation for collaboration. Since profits laundering is indispensable for traffickers, they are generally willing to offer large bribes. Without financial liquidity the illicit enterprise would lack resources to conduct its daily operations, every step from compensating agricultural workers to hired legal counsels and bribed officials.

Enforcement

Drug trafficking enterprise follows the laws of supply and demand just like any other profit seeking business. Illicit nature of the merchandise means that standard regulatory measures are unavailable and enterprises need to provide for themselves. Enforcement is therefore present at every stage of the drug trade, from a street dealer to a kingpin.

Over the few decades, different styles of enforcement. The Medellin drug traffickers in the 1980s attacked Colombian political institutions and its political elite. The government supressive campaign after the assassination of Liberal leader Luis Carlos Galan spurred an absolute war. Pablo Escobar pioneered the tactic of indiscriminate terror attacks against the Colombian state and the society in general. Besides execution-style assassinations and excessive brutality bombing became widespread with car bombs killing hundreds of people during the most turbulent phase of his war against the Colombian state between 1989 and 1993. The objective here was to cripple the state and people to the point where they would reduce supression efforts. In contrast, the Cali-based traffickers persecuted non-state actors who threatened their interests. Bribery has been the preferred method of persuasion. Mexican traffickers demonstrated willingness and ability to resort to any tactic that will bring the desirable result, be it corruption of brutal sadistic violence.

Unlike most organizations, drug traffickers' actions affect national and often even international politics. Operating outside the legal Framework exposes drug traffickers to persecution from countless actors associated with the state. Both institutions and individuals posing a threat to drug trafficking become subjects to enforcement even though they are not formally participanting in drug trafficking. This includes, but is not limited to, politicians, judges, the judicial system in general, customs officials, military officers and others in similar positions of authority. The drug trafficking enterprises therefore extend their influence beyond cocaine production and sales. Ocassionally, enforcement reaches to the public when it is necessary to protect illicit businesses and their interests. Although enforcement plays integral role in drug trafficking operations, the ideal state of affairs would be de-regulation of law enforcement, which would allow traffickers to operate freely, increasing profits and reducing detection.

The Role of Trafficking Enterprises

It would be difficult to argue that drug trafficking constitutes an explicit regime, but there is an organizational structure that has been previously unaknowledged. The leadership role has been played by the Colombian and later Mexican trafficking organizations, which have been successful in forging alliances between trafficking groups. At the same time, it would be false to assume that the control exercised by the top level drug lords extends all the way down the chain of drug trafficking. The illicit enterprise monitors key aspects of production, smuggling into markets and profits laundering, in other words, the most lucrative parts of the drug trade. However, as cocaine goes deeper into the distribution network, the connection with the drug lords is lost. The cellular distribution network is designed to prevent law enforcement from tracing back up the chain to the upper echelons. For the trafficking enterprise, it is far more important to control supply and finances than micro-management. Control over these components has let them keep economic control over the trade and power is centralized in their hands. Competition is prevalent among different groups in drug trafficking and the top tier drug lords are able to use their extensive resources to their advantage. Abundant financial resources let the Colombian and Mexican traffickers coerce other actors into submission or compliance. They have the means and the power to force other groups under their leadership. As cocaine proceeds through the trafficking chain, the influence of the leadership diminishes. However, the laws of the market influenced by the top tier drug lords‘ control over price and supply determines the actions of lower level traffickers.

Politics of Cocaine

Political ambitions have been used to wield power, secure business deals and gain preferential treatment. In Colombia, Pablo Escobar and his associates used politics as a tactic to further unify their drug trafficking operations. In a rare example of direct political involvement, in June 1992 Escobar was elected as an alternate deputy to the Colombian Congress from the parliamentary list of Jairo Ortega Ramirez. During his tenure, Escobar sponsored civic programs including donations of several hundred new housing units to economically disadvantaged and construction of numerous illuminated sporting facilities in Medellín. With the exception of Pablo Escobar, Colombian traffickers have used their vast reserves of funds to support candidacies of various officials rather than running for office themselves. The presidency of Emesto Samper, for instance, had been tainted by rumours that the campaign was in part funded by drug traffickers. Cali drug money was allegedly channeled through Samper’s Partido Liberal.[58] Colombian drug lords eventually extended their reach throughout the Caribbean. Lynden Pindling, the Prime Minister of the Bahamas in the 1980s, was found guilty of colluding with Colombian traffickers.[59] Similarly, partnership with General Noriega and high ranking government officials in Cuba corrupted these governments and gave the traffickers a chance to consolidate smuggling networks.[60] Since the Colombian and then Mexican traffickers have been able to promote and foster institutional corruption, they have

[58] “Cali Drug Leader Caught, Making It 6 Now In Jail,” *New York Times*, August 7, 1995. https://www.nytimes.com/1995/08/07/world/cali-drug-leader-caught-making-it-6-now-in-jail.html.
[59] “Bahamas Leader Tied To Drug Bribe,“ *New York Times*, January 14, 1988, https://www.nytimes.com/1988/01/14/us/bahamas-leader-tied-to-drug-bribe.html.
[60] Larry Rohter, “Former Smuggler Ties Top Officials Of Cuba and Nicaragua to Drug Ring,“ *New York Times*, November 21, 1991, https://www.nytimes.com/1991/11/21/us/former-smuggler-ties-top-officials-of-cuba-and-nicaragua-to-drug-ring.html?mtrref=www.google.com.

been able to attract other constituent parts of the drug trafficking process because they can guarantee a profitable return. However, these particular examples of high level political bribery and corruption are not the preferred methods of trafficker's political involvement. In contrast, low-level bribes, attacking political institutions and leaders are typical forms of the trafficker's activities. In drug trafficking cases brought to the courts of the mid-1980s, judges were offered the choice between bribe, if they set aside the charges filled against traffickers and their associates, or death, if they convict. In Colombia, the term used for this tactic is *plata o plomo*, silver or lead. This simple but effective method rendered the justice system practically useless since only few judges, facing such dilemma, chose to convict defendants. This practice remains unchanged to date across the Americas. Furthermore, political leaders have been targeted for assassination, which decreased the government's initiative to crack down on the drug trade. Essentially, the top tier traffickers have infiltrated and corrupted Colombian and Mexican political machinery. In doing so, they have been successful in bending the rules to their favor, winning concessions from governments and they are able to act relatively independent from the rule of law. In his time, Pablo Escobar successfully coerced Colombian Supreme Court justices who in turn nullified the extradition treaty with the United States.[61] By creating a relative safe haven in Colombia, the traficking chiefs have been able to exercise control over other parts of the drug trade. This has let the Colombian drug lords operate freely within their own country as they exercised a great deal of power and maintained loyal followers.

A part from fighting governments, traffickers have also fought the left in Latin America. In Peru and Colombia, drug traffickers fought with local guerrilla groups in rural regions. Smugglers formed alliances with landowners, the military and other regional power groups to assist in the supression of left-wing guerrilla groups.[62] Cooperation based on shared priorities with the military or traditional elite are favored when they benefit traffickers. They usually employ a strongly pragmatic approach to business, which opens up a number of possible actions from bribery to murder, considering the illegality of the trade. Despite the fact this kind of cooperation is usually temporary, it is indicative of the collusion that extends beyond the division of the legal and illegal realm of business. Drug traffickers can and are willing to operate with legitimate groups in society against a common enemy. Particularly during the latter stages of the Cold War, the drug traffickers contributed to the U.S. foreign policy of containment by attacking guerrilla movements at their roots.

On the international level, the Colombian drug trafficking enterprises have been willing to outsource various components of the drug trade to external specialists. In the mid-1990s, Mexican traffickers, for instance, have taken the mission of smuggling product into the United States as Cali smuggling routes had been hit by law enforcement efforts and intensified surveillance. Similarly, the drug chiefs negotiated agreements with other illicit enterprises and criminal groups to ensure the continued viability of the cocaine trade. The Colombian and Mexican entrepreneurs still maintain a virtual monopoly over the world‘s cocaine supply because they have been able to reach agreements with regional groups.

2.2. Illicit Entrepreneurs

[61] Clawson, *The Andean Cocaine Industry*, 38.
[62] Ibid. 52.

Description and analyses of drug trafficking enterprises will develop along a few main lines. The basic and to some extent the most important element of an enterprise is the entrepreneur who represents the will and the intent behind the business operations. Therefore, the first part of this section will focus on the most famous captains of the illicit drug business in the recent decades. There short biographies will provide basis for an analysis focusing on association and networking in illicit businesses, in other words, on the process when a group of entrepreneurs comes together to create a larger scale enterprise on international level and to conduct all necessary business-related activities such as production, transportation, distribution and profits laundering.

Exploitable ties and illicit networking

Despite the dependent variable of invididual talents skills, ambitions, there is also a systemic variable of exploitable ties, which plays a vital role in formation and development of illicit enterprise. As a path to better understanding of the phenomena commonly designated as organized crime Klaus von Lampe proposed the concept of criminally exploitable ties.[63] Despite the focus on organized crime and criminal ties, many aspects of this concept offer broader applicability, which can be applied to a more general level of illicit association.

Von Lampe's approach takes the relations between actors as a fixed point of reference. Regardless of whether the debate centers on certain activities, such as drug trafficking or money-laundering, on certain collectivities, such as cartels, or on systemic conditions, such as corruptive alliances of businessmen, politicians and public officials, in every instance the participants are connected through criminally exploitable ties, which in turn combine to form illicit networks.

The network approach to the analysis of illicit activities is not new, it has been used by law enforcement organizations as an investigative tool, and also by many scholarly analyses as a means to overcome the shortcomings of traditionl organization theory with regard to the fluid character of illicit microstructures. The relevance of the network perspective will be discussed within three basic contextual levels: the level of individual illicit networks, the level of illegal monopolies, and the level of intersection between licit and illicit structures.

The elementary unit of both licit and illicit cooperation is the exploitable tie linking two actors. Using the term exploitable emphasizes that in the debate the focus is not exclusively on manifest structures, but also on latent ones, which are activated only sporadically when opportunities arise. In order for a link between actors to be exploitable, it needs to show two main characteristics: corresponding ilegal dispositions and a common basis of trust.

The first prerequisite of collaboration between actors is their willingness to engage in the same type of illegal behavior, be it smuggling of contraband, investment fraud or any other illicit enterprise. The question where these dispositions originate continues to be a matter of general criminological investigation. In a simplified terms, actors need to share their illicit

[63] Klaus von Lampe, "Criminally Exploitable Ties: A Network Approach to Organised Crime," in *Transnational Organized Crime: Myth, Power and Profit,* ed. Emilio Viano, José Magallanes and Laurent Bridel (Durham, NC: Carolina Academic Press, 2003).

interests and preferences for them to cooperate, drug traffickers and bank robbers might not be gravitating towards each other as much as drug traffickers and money-launderers.

Simple intersection between illicit interests and preferences is unlikely to provide sufficient basis for completion of an endeavor, a more common basis of trust is needed among the actors involved. This assumption stems from the general notion that social interaction tends to be embedded in social relations.[64] Trust is needed to minimize risks inherently present in illicit interaction. Among them the possibility that one of the parties involved might be a covert police informant, or personal negligence resulting in violation of illicit agreement upon which the endeavor depends. Trust plays even larger role considering that illicit entrepreneurs cannot submit a complaint related to breach of contract to legal courts.

Necessary basis of trust can be found in bonding relationships, such as family affiliation, childhood friendships or prison acquaintances, but also in the armed forces or intelligence services.[65] The aspect of individual affections in such relationships aside, there is a high degree of behavioral predictability as a result of the long-term testing of personal characteristics. Nevertheless, such a bond between actors does not have to be a direct one, connection can be through an intermediary who maintains a bonding relationship with other actors individually.[66]

Actor's past conduct, or his existing affiliations, can stimulate generalized expectations, which might provide a common basis of trust. This trust based on recommendation, reputation or previous accomplishments in certain fields, can be observed in recruitment of younger members into illicit enterprises or in vetting of potential business partners.[67] Still, in every step of such process considerations about correlation between degree of inherent risks in illegal interaction and the strengh of existing bonds would play a vital role. Ideally, extremely risky interactions will be based on trust that has been built over time. Considering usually shorter time horizons of illicit interactions and substantial risk of damage resulting from failure of a continuous illicit cooperation, pre-existing bonds and ties are likely to be preferred whenever available.

Trust, as desired basis for cooperation, might not always be available in establishing an illicit enterprise and alternative guarantees might be pursued, such as promise of material gains or threats regarding use of violence. Peter Reuter argued this might be the case, but only at a high cost not incurred by positive non-economic ties.[68]

In summary, for an individual actor his portfolio of criminally expolitable ties represents the social space in which illicit cooperation is objectively and subjectively a viable option. Actor's action scope then depends on prexisting bonds of trust rather than cooperation purposefully developer through the use of violence or financial rewards.

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[64] Mark Granovetter, "Economic Institutions as Social Constructions: A Framework for Analysis," *Acta Sociologica* 35, no. 1 (1992).
[65] Peter A. Lupsha, "Networks versus Networking: Analysis of an Organized Crime Group," in *Career Criminals*, ed. Gordon P. Waldo (Beverly Hills, CA: Sage, 1983), 59–87.
[66] Howard Abadinsky, *Organized Crime* (Boston: Allyn and Bacon, 1981), 83.
[67] Peter H. Reuter and John Haaga, *The Organization of High-Level Drug Markets* (Santa Monica, CA: Rand, 1989), 45.
[68] Peter H. Reuter, *Disorganized Crime: The Economics of the Visible Hand* (Cambridge, MA: MIT Press, 1983), 116.

Biographies of Colombian and Mexican illicit entrepreneurs provided below serve as evidence in support of the concept of criminally exploitable ties, and more generally the network approach to analysis, providing important leads to understand upon which basis the illicit traffickers built their smuggling enterprises.

Captains of the illicit drug industry

Despite the strategic focus of this dissertation, further assessments require adoption of more operational outlook to provide necessary data, particularly to underline the importance of individual traffickers for creation and management of a larger illicit network. In the following pages the relevant biographical and professional histories of founding fathers of modern drug trafficking industry in Colombia and Mexico will be summarized, to demonstrate some key characteristics of successful illicit entrepreneurs.

Colombia: Medellín

The main actors in the Medellín-based illicit trafficking association became Pablo Escobar, the Ochoa brothers, Gonzalo Rodriguez Gacha, and Carlos Lehder. It is important to emphasize that these individuals managed their trafficking enterprises, but often times worked together to pursue common economic and political interests.

Probably the most famous drug trafficker in history, Pablo Emilio Escobar Gaviria, was born in 1949, in Rionegro, Antioquia, to a peasant father and a public school teacher. Because of *La Violencia* the family moved often throughout the 1950s and in 1961 it settled in government housing in Envigado, a town south of Medellín. Escobar finished high school and later attended the Universidad Autónoma where he took accounting classes but never graduated.[69] In his early criminal years Pablo worked with his cousin, Gustavo Gaviria, mostly stealing cars and even reselling tombstones. Later he became involved in smuggling. The first organization Pablo went to work with was run by Don Alberto, later he became a gunman for Alfredo "El Padrino" Gómez López.[70] Gómez López's organization imported American cigarettes and appliances into Colombia, it also had connections among emerald smugglers in Bogotá, who exported to Mexican markets.[71]

For Pablo Escobar it was the wealth of early smugglers that lured him into the business in spite of violence inherently present in this business. Working as a cargo escort and a gunman, he learned about the profitable drug trade, he became familiar with smuggling routes and he used violence for intimidation on daily basis. He also learned how to manage the underground economic structure for smuggling goods, to payoff customs officers, police and military, as well as the use of local politicians to transport illicit cargo through Colombian highways.[72] Competing for influence and profits, Pablo also learned how to intimidate his rivals.

Smugglers gained favor of many in the Colombian society by bringing in affordable imported goods desired by all social circles, especially the middle class that could afford them.

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[69] Alfonso Salazar, *La parábola de Pablo: auge y caída de un gran capo del narcotráfico* (Bogotá: Planeta Columbiana, 2001), 32–44.
[70] Fabio Castillo, *La Coca Nostra* (Bogotá: Editorial Documentos Periodísticos, 1991), 50; Andre Cavalier Castro, "Droga: Debate Artificial in E.U.," *El Tiempo*, September 14, 1996, 283; Salazar, *La parábola de Pablo,* 55.
[71] Ibid.
[72] Ibid.

Moreover, the ability to generate enormous profits, sufficient enough to bribe the authorities, provided smugglers with an aura of invincibility because they provided a service to top level clients. Authorities in their own part were willing to participate because smugglers provided them with alternate sources of income.

Economic power and social recognition gave Colombian smugglers a unique status within the rigid class system in which they operated. They had the ability to create jobs and provide otherwise unavailable goods at acceptable prices while undermining the government's import tariffs. Ultimately, making the profitability of their trade publicly visible, smugglers provided an avenue for upward mobility to many poor Colombians like Pablo Escobar himself.

By the late 1970s, Pablo Escobar and his cousin Gustavo became fulltime cocaine traffickers and they developed a business strategy that involved procuring coca paste from Peru and Ecuador, refining it and then shipping it through some 20-30 routes to their distribution points in the United States.[73] In 1977, Escobar was twenty eight years old, a millionaire and a rising star among Medellín's drug traffickers.[74] Escobar became wealthy at a young age, but his rise within the drug business circles was not accidental. He learned the illicit trade from trafficking pioneers Don Alberto and Alfredo Lopez Gomez, he took advantage of the ruthlessness he practiced as a professional hit man. He also developed important business contacts that allowed him to reach the U.S. markets, leveraging the high profit margin for trafficking cocaine. He took advantage of the ineffective law enforcement in Colombia and elsewhere.

Jorge Luis, Juan David, and Fabio Ochoa were another prominent representatives of the Medellín-based illicit trafficking enterprise. Given the family's economic status, they had more comfortable upbringing than that of Pablo Escobar. Some accounts suggest the Ochoa brothers were introduced into the trafficking business by their uncles, Hernando Restrepo Ochoa and Fabio Restrepo Ochoa, themselves pioneers of the marijuana drug business of the 1960s and early 1970s.[75]

In the early 1980s, the Ochoa brothers connected with Pablo Escobar, Jose Gonzalo Rodriguez Gacha and Carlos Lehder trying to consolidate the upstream and downstream stages of the cocaine trade. Rodriguez Gacha managed the coca paste acquisition, Escobar controlled cocaine refinement. In the downstream stages, the Ochoas and Lehder would organize transportation of cocaine to the Caribbean and into the United States.[76] The division of labor and mutual cooperation allowed them to manage large shipments of cocaine into the U.S. by ship or plane. This marked a clear progression and difference in scale between the cocaine traffic of the 1980s and the marijuana traffic of the 1970s that heavily relied on the use of mules. While mules could only traffic a couple of kilos at a time, airplanes and boats could transport tons of cocaine from the late 1970s onward.

Another important figure among the leaders of the Medellín cocaine enteprise was José Gonzalo 'El Mexicano' Rodriguez Gacha. Scarce information is available on his upbringing,

[73] James Mollison and Rainbow Nelson, *The Memory of Pablo Escobar* (London: Chris Boot, 2007), 56.
[74] Salazar, *La parábola de Pablo,* 32–44.
[75] Fabio Castillo, *Los Jinetes de la Cocaína* (Bogotá: Editorial Documentos Periodísticos, 1987), 65; Guy Gugliotta end Jeff Leen, *Kings of Cocaine: Inside the Medellín Cartel – An Astonishing True Story of Murder, Money and International Corruption* (New York, NY: Simon and Schuster, 1989), 26.
[76] Paul Eddy et al., *The Cocaine Wars* (New Your, NY: W. W. Norton & Co Inc, 1988), 290.

besides the fact he was born in 1946 in Pacho, Cundinamarca, a small town in between Bogotá and the emerald mines of Muzo. Gacha began his career as a gunman for Alfonso Caballero, an emerald smuggler selling his contraband to customers in Mexico and Miami. Mexican connections later helped Gacha rise to prominence among the Medellín-based traffickers.[77]

In 1976, law-enforcement authorities registered Rodriguez Gacha's involvement in the narcotics business alongside Pablo Escobar and the Ochoa brothers, who worked with him in upstream and downstream aspects of drug trafficking. In the early 1980s Rodriguez Gacha had already amassed numerous properties was pioneering the cultivation and refinement of coca in the jungle regions of southern Colombia. Some of the most famous industrial-sized refinement complexes were constructed around 1982 in the jungles of the Caqueta department, among them Villa Coca, Coquilandia, and the infamous Tranquilandia. These were all destroyed by the Colombian authorities in 1984.

Rodriguez Gacha establshed a security apparatus to protect trafficker properties in rural areas, such as the El Magdalena Medio region of Colombia, where land was relatively inexpensive because guerrillas, specifically the FARC, operated in the area. Rodriguez Gacha also became important because he was instrumental in creating counter-insurgent paramilitary groups in the 1980s, which later evolved into the *Autodefensas Unidas de Colombia* (AUC), which remained an important force until 2004.

The last among leaders of importance was Carlos Lehder Rivas, born in 1950 in the city of Armenia, Quindio, into an upper middle-class home. Eventually, Lehder's parents separated, his mother moved to New York City and brought Carlos Lehder with her when he was in his teens.[78] In 1974, Carlos Lehder was convicted of dealing marijuana and stealing cars in New York, offense that earned him 16 months in prison. After completion of his sentence, Lehder returned to Colombia and later, in 1978, he bought properties in the Bahamian Island of Norman's Cay, which included a house, a marina, a yacht club, a hotel, and most importantly: an airstrip. In 1979, avoiding arrest for trafficking cocaine to the United States, Lehder returned to his hometown of Armenia, Quindio a millionaire.[79]

Lehder's rise to prominence within the international cocaine trafficking industry resulted from various factors such as the shift in demand from marijuana to cocaine, the fact that the established smuggling networks left by the marijuana trade that were used for cocaine distribution, visible lack of enforcement regarding counter-narcotics laws in the Western Hemisphere, and ultimately the unsatisfactory money laundering controls in the United States. These external factors provided Carlos Lehder with an economic incentive to enter the cocaine trade. His political influence in Quindio's local politics resulted from tolerance of the political elites towards drug traffickers and also the lack of controls on how politicians financed their electoral campaigns both at local and national level.

The above-mentioned characteristics of the Medellín-based leadership suggest that they were all entrepreneurs with little formal education, but a strong ambition to become wealthy.

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[77] "Le decían 'El Mexicano'; fue pionero de alianza de capos," *Zocalo*, January 5, 2014. http://www.zocalo.com.mx/seccion/articulo/le-decian-el-mexicano-fue-pionero-de-alianza-de-capos-1388943733.

[78] Dominic Streatfeild, *Cocaine: An Unathorized Biography* (New York, NY: Picador 2001).

[79] Jorge Eliécer Orozco, *Lehder – El hombre* (Bogotá: Plaza & Jánés, 1987).

All the major figures were contemporaries, born between the late 1940s and early 1950s. Their know-how and business ideas resulted mainly from practical experience, which they obtained at an early age. By the time they entered their thirties, all Medellín-based trafficking leaders were multi-millionaires. That was partially due to a high-profit merchandise and also to the fact there were relatively few traffickers in the business at the time.

All of the leaders, with the exception of Carlos Lehder, had a clear link, sometimes even through their families, to illegal activities early in life. Once the Medellín-based traffickers became leaders in their own right they started industrializing their cocaine smuggling operations. Instead of using mules to carry drugs, they went to create huge refineries and to use small airplanes for distribution.

One noticeable difference found in individual backgrounds of the Medellín leaders, which influenced their respective attitudes towards the use of violence, was the nature of their initial experiences in the business. Pablo Escobar and Gonzalo Rodriguez Gacha were originally performing as gunmen in smuggling organizations, hence there inclination to use of violence on regular basis. Carlos Lehder and the Ochoa brothers used violence whenever necessary, but primarily within trafficking circles to resolve business conflicts. Each of the main trafficker‘s socio-economic background combined with attitude towards the use of violence had implications for their individual operations and efforts to influence political agenda. The Ochoas brothers were reasonable and thoughtful, operating discreetly with the tendency to co-opt the political establishment. They seemed to have no ambition to acquire direct political power. Although Carlos Lehder was in charge of the *Muerte A Secuestradores* (MAS) political propaganda, he never gravitated towards targeting Colombia’s traditional political establishment. A white supremacist, Lehder saw himself a member of elite due to his German heritage and also because of his entrepreneurship successes. Rodriguez Gacha was ruthless towards leftist guerrillas and became responsible for the decimation of the *Union Patriotica* (Patriotic Union), the FARC’s legal political party. He became a sworn enemy of insurgents and forged alliance with cattle ranchers who violently opposed guerrilla harassment in the Middle Magdalena region. In contrast, Rodriguez Gacha was not as ruthless as Pablo Escobar in warring with the political elites. Pablo Escobar’s stellar and rapid success as an entrepreneur led him to believe that he deserved a role in the political and economic establishment of Colombia. He used violence on political elites and innocent people to obtain desirable results. He was responsible for some of the most shocking displays of violence ever witnessed in the drug-related affairs. Pablo Escobar was the first narcoterrorist.

After establishing himself among the Colombia’s top tier drug traffickers, Escobar sought to enter the political life and to hold elected office. In 1982 Escobar was elected as an alternate member of the Chamber of Representatives of Colombia, as part of the Colombian Liberal Party. Nevertheless, many deputies were opposing his participation in the legitimate political process and made public inquiries into origins of his wealth in order to discredit him through disclosure of his trafficking activities. Once the prospects for his political career faded, Escobar went to exercise his political ambitions by means of bribery and violence. Especially after the Colombian government decided to cooperate with the U.S. authorities in establishing extradition treaty that allowed for Colombian drug traffickers to be prosecuted in U.S. courts of justice.

Pablo Escobar's ruthlessness was legendary. His rise was opposed by many honest government officials, judges, journalists and policemen, who did not like the growing influence of this street thug. Escobar popularized the Colombian way of dealing with enemies, *plata o plomo* became one of his key business principles. Executions were often obscenely violent with the shock effect intented to prevent further resistence to Escobar's will, which often included families and relatives of his targets among judges and law-enforcement. The exact number of honest men and women killed by Escobar remains unknown, but it likely went well into the hundreds and perhaps into the thousands of victims.

In combating the Extradition treaty of 1979, which came into effect in 1982, Escobar was even rumored to be behind the 1985 attack on the Supreme Court, carried out by the M–19 insurrectionist movement in which some 10 Supreme Court Justices were killed. Later, in 1989, he ordered the assassination of presidential candidate Luis Carlos Galán and on November 27, 1989, Escobar ordered to plant a bomb on Avianca flight 203, killing 110 people. In addition to these high-profile assassinations, Escobar and his organization were responsible for the deaths of countless magistrates, journalists, policemen and even criminals inside his own organization.

By the mid-1980s, Pablo Escobar was one of the most powerful men in the world. Forbes magazine listed him as the seventh-richest man in the world. His empire included an army of soldiers and criminals, a private zoo, mansions and apartments all over Colombia, private airstrips and planes for drug transport and personal wealth reported to be in the neighborhood of $24 billion. He could order the murder of anyone, anywhere, anytime.

Colombia: Cali

The Cali Cartel became the popular title referring to a loose association of independent drug trafficking organizations operating out of the town of Cali, Colombia. Its origins could be traced to a small criminal gang known as Los Chemas, founded in the early 1970s by Gilberto Rodríguez Orejuela and José Santacruz Londoño. Initially, Los Chemas engaged in counterfeiting and kidnapping, but eventually they expanded into the smuggling of cocaine base from Peru and Bolivia, which they later refined into the final product, cocaine.

From simple criminal roots, the Cali-based trafficking enterprise had grown into one of the most powerful international drug smuggling organizations in history. Towards the mid-1990s, it was responsible for supplying most of the cocaine consumed in the United States and in Europe. Every year, the the organization smuggled hundreds of tons of cocaine into the United States and Europe and launders billions of dollars in drug profits.[80]

Despite the fact each of the major Cali trafficking groups were separated and independent enterprises, they were known to share some resources when their interests coincided. It was common for two or more Cali groups to combine cocaine shipments for transport to the United States. Similarly, different Cali groups could cooperate in drug money laundering operations.

Gilberto Rodríguez Orejuela and his younger brother, Miguel, controlled what might have been the most powerful of the Cali organizations. Gilberto was believed to be responsible

[80] Drug Enforcement Administration, "The Cali Cartel: The New Kings of Cocaine," November 1994, 1, https://www.ncjrs.gov/pdffiles1/Digitization/152436NCJRS.pdf.

for the organization's long-term strategic planning and he seemingly distanced himself from the daily operations of the organization. Miguel, on the other hand, used to micro-manage business activities insisting on being involved in the minuscule details of the organization's daily operations. The Rodriguez Orejuela organization was involved in all aspects of the cocaine trade, including production, transportation, wholesale distribution, and money laundering. In protecting their business they attempted to avoid the indiscriminate violence unlike their Medellín-based colleagues, at the same time they showed no restraints about engaging in kidnapping and physical threats or even murders to intimidate business associates and competitors.

The Rodriguez-Orejuelas used a wide variety of sophisticated transportation and smuggling techniques to deliver its cocaine to the United States. Tons of cocaine were smuggled into Mexico each year by way of aircraft and vessel for subsequent shipment across the U.S. southwest border. The Rodriguez-Orejuela brothers usually contracted the services of an independent Mexican drug transportation groups to smuggle cocaine from Mexico to the United States via land vehicles. Southern Florida was also used as a key point of entry for cocaine smuggled aboard vessels. After the cocaine was smuggled into the United States, wholesale distribution operations were carried out in Houston, Los Angeles, Miami, New York City, and other U.S. cities. The Rodriguez-Orejuela organization also ran money laundering operations in these major U.S. cities.

Benefiting from the fact that wholesale prices for cocaine were higher in Europe than in the United States, the Rodriguez-Orejuelas also became active throughout Western Europe. Wholesale prices for cocaine in Europe generally ranged from $30,000 to $50,000 per kilogram, compared to $10,500 to $40,000 per kilogram in the United States. The Iberian Peninsula served as a key entry point for the organization's cocaine destined for the major cocaine markets in France, Germany, Italy, the Netherlands, and the United Kingdom.

The Cali Cartel leaders exerted direct command and control authority over all major aspects of the international wholesale cocaine trafficking. Cali-based organizations were importing cocaine base from Peru and Bolivia, converting it into cocaine HCI at clandestine laboratories in Colombia, and smuggling the final product abroad for wholesale distribution. In 1994, International Narcotics Control Strategy Report estimated the world's total potential cocaine production in 1993 to be between 770 metric tons and 805 metric tons. The Cali Cartel organizations were trafficking the vast bulk of this production.

Mexico

Mexican drug trafficking organizations started to regain prominent position of the main supplier of illicit narcotics to the U.S. in the early 1990s when increased political, military and law-enforcement anti-drug effort closed the Caribbean for illicit trafficking and forced the Colombians to seek more inland routes into the U.S. market.[81] Mexicans were thus given the opportunity to increase profits and strengthen their position in the illicit drug trade by taking larger part in the cocaine delivery to their northern neighbor. As the volume of cocaine trafficked through Mexico increased local organizations originally hired to smuggle cocaine across the border and leave it in nearby warehouses for Colombian distributors managed to take

[81] United Nations Office on Drugs and Crime, *World Drug Report 2010*, 235.

over the distribution process themselves developing capability to deliver the cargo anywhere in the United States.[82]

At that important moment drug traffickers from the Mexican state of Sinaloa were in the best position to take advantage of recent developments. They established contacts with Colombians in the 1970s and some 20 years later they were about to profit from that connection. Probably the first major Mexican exporter of Colombian cocaine was Cuban born Alberto Sicilia Falcón, introduced to Pablo Escobar by Honduran trafficker Juan Ramón Matta-Ballesteros.[83] After Sicilia Falcón's arrest in mid-1970s Miguel Ángel Félix Gallardo took his position as a leading figure of what became later known as the Guadalajara cartel.

Two years before his arrest in 1989 Félix Gallardo, former officer of Mexican Judicial Federal Police, who became the most powerful narcotraficante in the country and founding father of modern Mexican drug trafficking, decided to divide the originally large illegal enterprise into various successor organizations led by his lieutenants less known to law-enforcement authorities in order to facilitate the illicit trafficking and avoid detection.[84] Trafficking routes around the border town of Tijuana were given to Arellano Félix brothers whose organization became known as the Tijuana cartel, or simply AFO. The territory, or *la plaza* in the trafficker's jargon, of Ciudad Juárez went to Carrillo Fuentes family that established the Juárez cartel. The Sonora cartel under Miguel Caro Quintero controlled the Sonora corridor. The city of Matamoros in the Mexican state of Tamaulipas became *plaza* of Juan García Ábrego and the Gulf cartel. Joaquín Guzmán Loera and Ismael Zambada García became the leading figures of the Sinaloa cartel that inherited the Pacific coast of Mexico. Félix Gallardo maintained control of the Guadalajara cartel serving as an umbrella group for the other organizations and managed relations with the top men in Colombia until his arrest.[85]

Mexican trafficking in this phase was small in terms of the number of individuals involved and did not require heavy firepower or large enforcement apparatuses because it could rely on the state for protection and mediation of internal disputes. Traffickers were so cooperative in this period that they would pool money together to buy large loads of cocaine and share in the profits.[86]

The beginning of the 1990s brought other important changes to the illicit drug trafficking industry in the Americas. First, Juan García Ábrego concluded a critical deal with his partners in Cali. It was agreed that in the future Colombians wouldn't pay their Mexican counterparts in cash, but leave them in possession of half of the drug cargo and Mexicans will not only take all risks of further distribution and sale but will also keep all the profits.[87] Second, increased political, military and law-enforcement effort brought upon Medellín and Cali cartels

[82] Chris Eskridge and Brittawni Olson, "The Mexican Cartels and Their Challenge to Popular Sovereignty," in *Transnational Organized Crime: Myth, Power and Profit,* ed. Emilio Viano, José Magallanes and Laurent Bridel (Durham, NC: Carolina Academic Press, 2003), 105.
[83] Malcolm Beith, *The Last Narco* (New York, NY: Grove Press, 2010), 40–55.
[84] Ioan Grillo, "Autumn of the Capo: The Diary of a Drug Lord," *Time Magazine*, May 20, 2009, http://content.time.com/time/world/article/0,8599,1899404,00.html.
[85] Jerry Langton, *Gangland: The Rise of the Mexican Drug Cartels* (Hoboken NJ: Wiley, 2012), 65–66.
[86] Nathan Patrick Jones, "The State Reaction: A Theory of Illicit Network Resilience," (PhD. Diss., University of California, Irvine, 2011).
[87] Eskridge and Olson, "The Mexican Cartels," 106.

forced these organizations into gradual decline that culminated with Escobar's death in December 1993 and numerous arrests of Cali cartel top leaders in 1995.

2.3. Illicit Networks

The following segment focuses on various forms the association of illicit entrepreneurs might take. Illicit networks and organizations will be described and assessed as they appeared in the modern day drug industry with an analysis identifying priorities, *modus operandi*, best practices as much as deficiencies of those business structures. Subsequently, business models designed by illicit drug traffickers will be analyzed with particular emphasis on key tactics deployed, such as corruption and the use of violence.

Illicit Network Analysis

In recent decades the illicit global economy, that is the system of transnational economic activities that are criminalized by states in importing or exporting countries,[88] has become a subject of increasing public and academic interest with corresponding growth in literature. Furthermore, taking into consideration the robust research on organized crime and network theory as applied to both states and criminal actors, it is important to define examination of existing sources both in scope and limits. Within the framework of this dissertation, the key interest is therefore on the structure of drug trafficking organizations or profit-seeking illicit networks. Large segment of literature on international relations focuses on the positive aspects of networks, yet the main focus here is on "illicit" or "dark networks."[89] Arguably, understanding international organized crime and terrorism in terms of networks has become a widely accepted paradigm in the field of international relations.[90] Illicit network structure triggers different reactions from states as will be argued later. An assessment of what particular characteristics of illicit networks have been identified in the literature on illicit networks is thus critical.

The available literature on illicit networks can be divided in the following manner: (1) research focused on the internal structure of illicit networks, (2) research focused on the structure of the illicit network in relation to its host state and (3) research aimed at the global structure of illicit networks which analyzes the structure of illicit networks based within the context of globalization, which takes into account broader political and economic arguments.

This particular organization of resources allows for the subsequent analysis to be executed on three main levels: (1) tactical – assessing the lower levels of trafficking business like traffickers, producers, distributors and enforcers; (2) operational – how state responds to the illicit network, whether by implementing policy of collusion, tolerance or confrontation; and (3) strategic – assessing the impact of globalization on illicit networks and their implications for international relations.

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[88] Richard H. Friman and Peter Andreas, *The Illicit Global Economy and State Power* (Lanham, MD: Rowman & Littlefield Publishers, 1999); Willem van Schendel and Itty Abraham, eds., *Illicit Flows and Criminal Things: States, Borders, and the Other Side of Globalization* (Indiana University: Indiana University Press, 2005).
[89] Jorg Raab and H. Brinton Milward, "Dark Networks as Problems," *Journal Of Public Administration and Research Theory* 13, no. 4 (2003): 413–439.
[90] Mette Eilstrup-Sangiovanni and Calvert Jones, "Assessing the Dangers of Illicit Networks: Why al-Qaida May Be Less Threatening Than Many Think," *International Security* 33, no. 2 (2008).

Despite the fact that many scholars and authors do not explicitly follow any of the above mentioned levels of analysis, their invididual focus places them implicitly at some of these levels. The following pages will present some ways in which the various analyses can be synthesized to complement each other. I will describe areas and points of convergence where concepts presented by these three levels of analysis can be combined and perceived as complementary, not as mutually exclusive.

Tactical Level of Analysis: The Internal Structures of Trafficking Organizations

Academic scholars, government and NGO researchers conceptualized the internal structure of drug trafficking organizations in various manners. Large segment of existing research tends to perceive organizations and networks as mutually exclusive categories, while they are rather flexible concepts each with important ideas for understanding the relationship between structure and resilience as the following pages will demonstrate.[91]

Networks

In Advent of Netwar, Arquilla and Ronfeldt conceptually defined networks as the space between markets and hierarchies.[92] Implicitly, this definition postulates a continuum, where one extreme is represented by the ideal of market place with buyers and sellers provided with perfect information, where price mechanism is driven exclusively by supply and demand, and the other extreme represents the perfect hierarchical bureaucracy, with various management layers organizing available resources towards singular objectives, which are not necessarily addressed by markets. Between these two ideal forms is reality; which are networks.[93]

Both in licit and illicit business, networks can be described as relationships between nodes or actors which can reduce transaction costs and resolve collective action problems in the absence of central authority.[94] Additionally, filial networks based on trust can provide illicit networks with protection from rival and state law enforcement infiltration.[95]

In the field of network theory, some reject the clear distinction of markets, hierarchies and networks, claiming hierarchies are simply highly centralized networks, while markets are network nodes with no ties.[96] Page and Podolny define networks in the following manner:

> Any collection of actors ($N \geq 2$) that pursue repeated, enduring exchange relations with one another and, at the same time, lack a legitimate organizational authority to arbitrate and resolve disputes that may arise during the exchange.[97]

Survival of networks reflects both evolution and market principles. When a particular node is removed from existing network, another one eventually assumes its functional place or

[91] John Arquilla and David Ronfeldt, *Networks and Netwars: The Future of Terror, Crime, and Militancy* (Santa Monica, CA: RAND Corporation, 2001).
[92] Ibid.
[93] Grahame F. Thompson, *Between Hierarchies and Markets: The Logic and Limits of Network Forms of Organization* (Oxford, UK: Oxford University Press, 2003); John Scott, *Social Network Analysis: A Handbook*, 2nd ed. (Newberry Park, CA: Sage, 2000), 2.
[94] Stanley Wasserman and Katherine Faust, *Social Network Analysis: Methods and Applications* (Cambridge, UK: Cambridge University Press, 1994).
[95] Arquilla and Ronfeldt, *Networks and Netwars*, 2001.
[96] Joel M. Podolny and Karen L. Page, "Network Forms of Organization," *Annual Reviews in Sociology* 24, no. 1 (1998): 59.
[97] Ibid.

the entire network restructures itself to accommodate accordingly. Specific network nodes can be either individual actors or organizations in networks and their degree of internal hierarchy may vary from tightly to loosely coupled formations. Nevertheless, in their relationships with other nodes in illicit networks, they tend to be "loosely coupled."[98] Individual nodes as much as entire networks that do not adapt to external factors, such as the challenge represented by states or rival drug trafficking organizations, are excluded from the system in evolutionary fashion and then replaced by networks with higher resiliency.[99]

Mark Granovetter points out that nodes with weak ties to other segments of the larger system can serve as "bridges" between different parts of a network, a function which can be vital in the world of illicit activities, where profit opportunities are often based on contacts with other criminal networks supplying desired services, such as trafficking, distribution, enforcement or money laundering.[100] Explaining relative importance of individual nodes within a network, Burt labels "structural holes" those actors in networks who possess "social capital", which makes them important "non-redundant nodes."[101] This idea is important when explaining why some nodes gain substantial importance or lose their status.

In his analysis focusing on the 9/11 hijackers, Krebs describes the difficulties in unveiling covert networks. His conclusion states that there are four aspects to focus on in an attempt to understand illicit networks: (1) trust, (2) task, (3) money and resources, and (4) strategy and goals.[102]

Organizations

Despite the intuitive familiarity with the term, definition of organized crime represents a systematical challenge. Mexican government provides the following definition:

> When three or more people make an agreement to organize or form an organization to engage, in an ongoing or reiterated fashion, in activities that by themselves or together with other activities have as a goal or a result the commission of any or several crimes (…) they will be legally classified and penalized because of these actions as members of organized crime.[103]

Karl Weick defines organizations as collections of individuals trying to make sense of the world around them, going through an iterative learning cycle in the process of doing so. Ability to learn and make sense of their environment is the key prerequisite for organzitation's capacity to adapt. For example, ability to break through rigid hierarchical relationships, such as rank, to be more adaptable, could be listed among the factors which can prove the ability to survive disruptive events. Weick uses the Mann-Gulch disaster and the case of fire fighters trying to escape a massive fire to demonstrate the characteristics and failures of a resilient

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[98] Karl E. Weick, "Educational Organizations as Loosely Coupled Systems," *Administrative Sciences Quarterly* 21, no. 1 (1976): 1–19.
[99] Paul R. Chabot, "An Historical Case Study of Organizational Resiliency Within the Arellano-Felix Drug Trafficking Organization," (PhD. Diss., George Washington University, 2008).
[100] Mark Granovetter, "The Strength of Weak Ties: A Network Theory Revisited," *Sociological Theory* 1 (1983): 202–203.
[101] Ronald S. Burt, *Structural Holes. The Social Structure of Competition* (Cambridge, MA: Harvard University Press, 2001).
[102] Valdis E. Krebs, "Mapping Networks of Terrorist Cells," *Connections* 24, no. 3 (2002): 43–52.
[103] Juan Carlos Garzón, *Mafia & Co.* (Bogotá: Editorial Planeta Colombiana, 2008), 21.

organization.[104] Weick's work is foundational for the High Reliability Organization (HRO) literature and is relevant to the study of illicit networks and their resilience. Chabot adds two important environmental variables to Weick's complex circular model: "a vast consumer-base" in the United States and "diminished societal rule of law", both of which substantially strengthended the drug trafficking enterprises in Mexico.[105]

Despite the relative importance Weick places on cognition and the ability to learn, organizational survival in the aftermath of disruptive events also depends on the organizational architecture, especially in those cases when an organization is embedded within a larger network of alliances for service and resources.[106]

Among the most important arguments in the scholarly work on networks is that flatness in networks contributes to resilience.[107] Although Carzo and Yanouzas argued in their experiment involving different groups with various degrees of hierarchy that there was no statistically relevant difference between the speed of decision making among those organizations, Norman Hummon pointed out flaws in their experimental design, thus preserving the validity of the argument identifying flatness as important variable in network's success or failure.[108]

Networks or Organizations?

Examining various theoretical concepts, I personally tend to perceive organizations as individual nodes within larger networks. Observing the formation and functioning of various drug trafficking organizations in Mexico and Colombia provides evidence to support the claim. For example, the various organizations of Mexican traffickers represent a transport and protection node within a larger drug production scheme, which starts with illicit narcotics production in the Andes and ends with consumers in Europe and the United States. In many ways they represent a central node of the network, both geographically and relationally; commanding a dominant and central network position.[109]

In the realm of policy, often time false dichotomies are drawn between networks and organizations, as demonstrated by the 2006 Congressional Research Services report:

> *Traditional vs. Modern Networks.* Definitions of transnational organized crime often differentiate between traditional crime organizations and more modern criminal networks. Traditional groups have a hierarchical structure that operates continuously or for an extended

[104] Karl E. Weick, *Sensemaking in Organizations* (Thousand Oaks: Sage Publications, 1995).
[105] Chabot, "An Historical Case Study," 199.
[106] Karl E. Weick, *Making Sense of the Organization* (Oxford, United Kingdom: John Wiley and Sons Ltd, 2001).
[107] Phil Williams, "Transnational Criminal Networks," in *Networks and Netwars: The Future of Terror, Crime, and Militancy*, ed. John Arquilla and David Ronfeldt (Santa Monica, CA: RAND, 2001).
[108] Rocco Carzo and John N. Yanouzas, "Effects of Flat and Tall Organization Structure," *Administrative Sciences Quarterly* 14, no. 2 (1969): 178–191.
[109] Michael Kenney, *From Pablo to Osama: Trafficking and Terrorist Networks, Government Bureaucracies, and Competitive Adaptation* (University Park, Pa.: Pennsylvania State University Press, 2007); Michael Kenney, "The Architecture of Drug Trafficking: Network Forms of Organisation in the Colombian Cocaine Trade," *Global Crime* 8, no. 3 (2007): 233–259.

period. Newer networks, in contrast, are seen as having a more decentralized, often cell-like structure.[110]

Practical examples often stand in conflict with the above mentioned description. For example, characteristics of many Mexican drug trafficking enterprises comply with both definitions provided, therefore they can be seen as networks and organizations simultaneously. First, they tend to exist for extended periods of time, when they form, dissolve and restructure in relationships with other entities in the illicit industry to traffic drugs and engage in other criminal endeavors. Second, Mexican trafficking enterprises have evolving relationships with the Mexican state, which depends upon political party currently in power, the existing degree of democratic consolidation and ability to bribe local and state authorities.[111] Third, internally trafficking enterprises organize themselves along network lines. While some of them have several layers of management, they are also decentralized in decision-making and further compartmentalized into individual cells. The bifurcation between networks and organizations therefore makes little sense for the drug trafficking businesses.[112]

Somehow better understanding of drug trafficking enterprises can be developed from recognition that organizations represent nodes in networks. Geographically, the illicit networks under scrutiny here extend from the Andean coca-growing region of South America, to its final consumers in the United States, Europe and other world as much as increasingly Latin American domestic markets. Functionally, these enterprises include a variety of actors: coca growers, extortion rackets at all production stages, transportation and distribution managers, processing laboratories, various trafficking nodes, landing-strip managers in Mexico, communications managers, enforcers, traffickers who specialize in trafficking at the US border, distributors and street-gangs within the United States territory.[113]

Phil Williams finds the practice of bifurcations drawn between hierarchies and networks as problematic, despite the practice's dominance in law enforcement and academia. Williams defines networks in broader terms to include organizations that may be hierarchical. In his view, a network can be perceived simply as a series of inter-connected nodes. These nodes can be individuals, organizations or companies, so long as they are connected in significant ways.[114] Furthermore, Williams argues that the traditional hierarchical model usually associated with Mafia families in the United States, does not need to be jettisoned. In the end, it is possible to have networks of hierarchies, hybrid organizational forms with some hierarchical components and a significant network dimension, possibly even a network of networks.[115] Seemingly, Williams finds the explanatory power of social network analysis in business and sociology in its emphasis on the relations between nodes.[116]

Among challenges within the network analysis is determining the limits of a network. That is to define its beginning and end, in other words, the criteria of its membership.[117] In a

[110] U.S. Library of Congress, Congressional Research Service, *Transnational Organized Crime: Principal Threats and U.S. Responses*, by John R. Wagley, RL33335 (2006), https://fas.org/sgp/crs/natsec/RL33335.pdf.
[111] Ricardo Ravelo, *Los Capos: Las Narco-rutas de México* (México, DF: Plaza Janés, 2005).
[112] Jones, "The State Reaction".
[113] Kenney, *From Pablo to Osama*.
[114] Williams, "Transnational Criminal Networks", 66.
[115] Ibid., 69.
[116] Ibid.
[117] Wasserman and Faust, *Social Network Analysis*.

hypothetical scenario, where ordinary citizen is forced to commit a crime on behalf of an illicit network, which threatens to assissinate his family members, if he does not comply, is this invidual part of a network, or is he simply a mean to an end? Moreover, in making an assessment, is the focus on individual nodes or the networks in general? A simple statement that networks survive or reform themselves despite the actions of state law enforcement seems rather tautological in nature, especially when considering the powerful supply and demand forces involved in illicit trafficking. Furthermore, are specific individuals the nodes or actors of a network, or are these the entire organizations?

This analysis considers trafficking nodes and the organizations that control them as its level of analysis. Individual nodes will be assessed internally for flatness or degree of hierarchy measured in terms of management layers. Despite its intended focus, this analysis is also aware of trafficking nodes' position in larger global networks.[118]

Networks often allow for flatter organizational structures by bringing organizations together in "loose couplings" that are quite flexible and adaptable.[119] Every node in the network has a degree of hierarchy based on its particular needs and the tasks it must perform.

Arquilla and Ronfeldt do not perceive nodes within criminal networks as hierarchically organized. This analysis of internal structures of the individual nodes discovered that there are indeed varying degrees of hierarchy. Arquilla and Ronfeldt are generally correct in their assesment that network nodes are not hierarchical, but as the empirical evidence will demonstrate, this is not always the case. Williams argues, there can be "networks of hierarchies," of such cases the core node in a wheel model network can be a good example.[120]

Arquilla and Ronfeldt identified three ideal network topologies which they call: (1) chain, (2) star or hub (wheel) network; and (3) the all-channel network. (1) In the chain network, people, goods, or information move along a line of separated contacts, and where communication has to travel through the intermediate nodes. (2) In the star or hub network, a set of actors are tied to a central (but not hierarchical) node or actor, and has to go through that node to communicate with each other. (3) In the all-channel network everybody is connected to everybody else.[121]

[118] Kenney, *From Pablo to Osama*.
[119] Weick, "Educational Organizations"; Weick, *Making Sense of the Organization*.
[120] Arquilla and Ronfeldt, *Networks and Netwars*.
[121] John Arquilla and David Ronfeldt, "The Advent of Netwars (Revisited)," in *Networks and Netwars: The Future of Terror, Crime, and Militancy*, ed. John Arquilla and David Ronfeldt (Santa Monica, CA: RAND, 2001), 7–8.

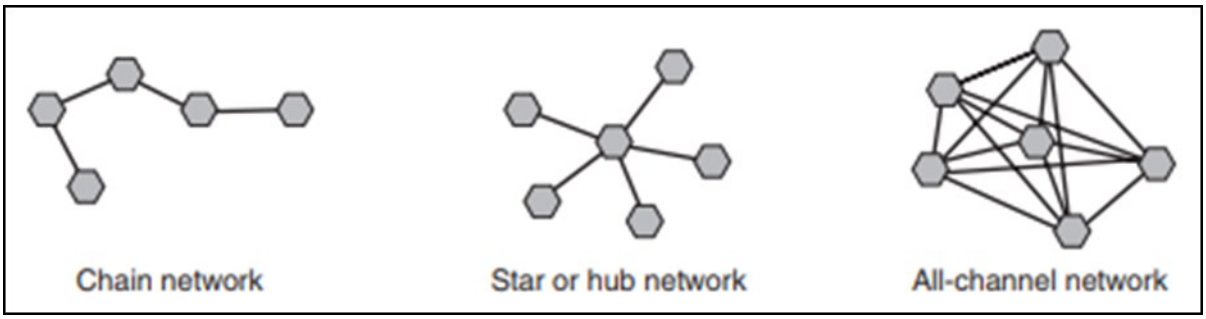

Figure 1. Network typologies by Arquilla and Ronfeldt (John Arquilla and David Ronfeldt, *Networks and Netwars: The Future of Terror, Crime, and Militancy* (Santa Monica, CA: RAND Corporation, 2001), 8.

These 3 network structures can represent a challenge to the state in various different ways. The all-channel network is unfitting to the illicit world due to its lack compartmentalization. Removing a single node in the network might enable discovery of the entire network. Therefore, the all-channel network is better suited for licit action groups within civil society, which utilize technology to challenge democratic states in a legal fashion through control of message and public opinion, rather than illicit traffickers or insurgencies.[122]

In contrast, chain networks are seemingly the most logical starting point for the inception and development of illicit networks and empirical evidence suggests that many such networks indeed begin their activities in the formation.[123] Eventually, chain networks consolidate into wheel networks by core nodes providing protection and enforcement services. Ultimately, wheel networks might be dismantled by the state and remaining nodes will usually reform into chain networks.[124]

A prototype model for this process is represented by drug trafficking in Colombia. The Medellín and Cali illicit entrepreneurs consolidated Colombian trafficking into two large wheel networks during the 1980's and 1990's.[125] Provided with assistance from the US military, the Colombian government dismantled the core nodes of these networks in 1993 and 1995 respectively.[126] As a result, the Colombian trafficking model evolved into smaller specialized *cartelitos* more reminiscent of chain networks.[127]

A statement that Medellín and Cali cartels represented wheel networks is supported by Michael Kenney, who provided evidence via interviews with jailed Colombian smugglers. Assessing the smuggling aspects of the drug trafficking business, Kenney's key finding is that despite the description of these cartels by law enforcement as hierarchical and menacing, in reality they were very flat at 3 – 4 management layers. This analysis differs from Kenney's previous research in that it considers a broader range and volume of these organizations, which includes enforcers that are layer of management intensive. Kenney's earlier work also described how core nodes in a wheel network can be easily targeted by governments for removal.

[122] Jones, "The State Reaction".
[123] John Arquilla and Ravid Ronfeldt, *The Advent of Netwar* (Santa Monica, CA: RAND, 1996).
[124] Kenney, *From Pablo to Osama*.
[125] Ibid.
[126] John Bailey and Jorge Chabat, *Transnational Crime and Public Security: Challenges to Mexico and the United States* (San Diego: Center for U.S. – Mexican Studies, University of California, 2002); Mark R. Bowden, *Killing Pablo: The Hunt for the World's Greatest Outlaw* (New York, NY: Atlantic Monthly Press, 2001).
[127] Garzón, *Mafia & Co*.

Therefore, Kenney argues that wheel networks, while efficient and profitable, tend to be vulnerable to attack.[128]

Structural Flatness as a Positive Factor of Resilience

Flatness can have positive impact and increase resilience of illicit networks in various ways, which includes reducing decision-making times, mitigating the need for doctrine, increasing learning capability, adaptability and scalability through alliances.[129]

First, flatness reduces the duration of decision-making cycles. Fewer management layers enables flat nodes or networks to make decisions faster and then to implement them quickly throughout the network. Efficiency in implementing decisions is further enhanced by penalties for failure or insubordination, when illicit networks often exercise harsh punishments not only to individuals responsible but to their families as well. On the other hand, hierarchies tend to struggle with flexibility in their highly centralized bureaucratic structures and implementation of new procedures might prove more challenging for hierarchies.[130] However, institutionalizing procedures can be more difficult for flat networks or nodes because they have short memories and lack formal mechanisms like publications.

Second, there is no need for flat networks to formalize their operations through doctrinal handbooks and manuals.[131] Some networks, for example Al Qaeda, do create manuals and distribute them on the internet and elsewhere, but such a case is more of an exception.[132] In contrast, organizations like the military must go through an extensive learning process to create new doctrine. However, this process often results in failure due to differences within the bureaucracy. Various management layers, which must approve the changes in doctrine, and the cognitive dissonance about the founding principles of the institution are a source of stagnation.[133]

Organizational learning ability often contributes to flatness in structure. Networks willingly opt for flatness and compartmentalization as they learn from the failures of other criminal organizations. Flatness and learning are therefore "mutually constitutive" elements.[134] Flatness can cause faster learning and adaptability due to the ability to make decisions quickly and respond to changes in the external environment of the organization. Learning organizations will also flatten themselves through the practice of compartmentation.[135]

Experience, historical lessons and learning often result in tendency towards flatter structures. Among these experiences the key ones are learning the importance of compartmentalization and shift towards a low-profile strategy. Profit-seeking drug trafficking networks are more likely to adopt this strategy, since their primary objective is profit and not threatening the state, which is a goal pursued by terrorist networks. High profile in conducting

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[128] Kenney, "The Architecture of Drug Trafficking"; Kenney, *From Pablo to Osama*.
[129] Carzo and Yanouzas, "Effects of Flat and Tall Organization Structure".
[130] Kenney, *From Pablo to Osama*.; Carzo and Yanouzas, "Effects of Flat and Tall Organization Structure."
[131] Arquilla and Ronfeldt, *Networks and Netwars*.
[132] Kenney, *From Pablo to Osama*.
[133] John A. Nagl, *Learning to Eat Soup With a Knife: Counterinsurgency Lessons from Malaya and Vietnam* (Westport: Praeger, 2002).
[134] Audie Klotz and Cecelia Lynch, *Strategies for Research in Constructivist International Relations* (London, United Kingdom: Taylor & Francis Ltd, 2007).
[135] Kenney, *From Pablo to Osama*.

business results in drawing attention to illicit network activities, which in turn results in attacks from the state authority attempting to supress the network. In contrast, low profile strategy allows for risk and threat mitigation, which is beneficial for effectively conducting illicit commercial activities. Furthermore, diffuse and flatter networks can execute enforcement through ostracism. In other words, network nodes or actors drawing too much attention to network operations are removed simply by not being contacted again.[136]

Networks perceived as "loosely coupled" organizations also have the ability to decentralize decision-making, which improves information gathering and better understanding of their own decisions.[137] This is mainly due to a fact that information does not have to be filtered vertically toward a central bureaucratic hierarchy with numerous layers, consuming time along the way. Instead, individual specialised nodes in the network can and in fact are expected to make on site and timely decisions immediately, as they are organized in a decentralized fashion.

Diffused flatter networks are also capable of creating alliances and may indeed rely on partnerships to minimize the levels of hierarchy by minimizing their management needs.[138] This mostly results out of necessity since individual smuggling cells must be contracted to become part of larger networks. Mexican profit-seeking illicit networks often rely on "loosely coupled" street gangs in the United States and contract their services including a supply of individuals for enforcement, executions and assassinations on US soil, street level drug dealing and occassionally even retail distribution.[139] On the production level, some of the Mexican traffickers established alliances with entities like the FARC to provide security, regulate prices for coca farmers in Colombia and to ship cocaine to Mexico.[140] To provide examples outside of Latin America, for comparison, according to US officials, Pakistani militants have merged through their use of alliances into networks with no coherent leadership structure to attack.[141] Trust more than name brand recognition seems to be the dominant motive for smaller network nodes to engage in business dealings with other network actors.

Structural Flatness as a Negative Factor in Resilience

Equally to legitimate businesses, many criminal enterprises fail. Kahler points out there is a tendency to study successful criminal and terrorist networks, but not many studies examine failed networks.[142] In consequence researchers might overestimate the resilience of flat network structures.[143] Moreover, truly successful criminal networks remain virtually invisible and thus

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[136] Ibid.
[137] Weick, "Educational Organizations".
[138] Ranjay Gulati, "Alliances and Networks," *Strategic Management Journal* 19 (1998).
[139] Stergios Skaperdas, "Cooperation, Conflict, and Power in the Absence of Property Rights," *The American Economic Review* 82, no. 4 (1992); Stergios Skaperdas, "The Political Economy of Organized Crime: Providing Protection When the State Does Not," *Economics of Governance* 2, no. 3 (2001): 173–202; Weick, "Educational Organizations".
[140] Vanda Felbab-Brown. *Shooting Up: Counter-Insurgency and the War on Drugs* (Washington, DC: Brookings Institution Press, 2009).
[141] Sabrina Tavernise, Carlotta Gall and Ismail Khan, "Pakistan, in Shift, Weighs Attack on Militant Lair," *New York Times*, April 29, 2010.
https://www.nytimes.com/2010/04/30/world/asia/30pstan.html?mtrref=www.google.com.
[142] Miles Kahler, "Networked Politics: Agency, Power, and Governance," in *Networked Politics Agency, Power, and Governance*, ed. by Miles Kahler (Ithaka, NY: Cornell University Press, 2009).
[143] Eilstrup-Sangiovanni and Jones, "Assessing the Dangers of Illicit Networks".

they are impossible to study. Survival of criminal networks is an evolutionary process. Some manage to adapt successfully to their changing operational environment and survive, some fail to assimilate and then they are removed from the system. It can be postulated that on average flatness does contribute to increased resiliency, at the same time it might have the opposite effect for illicit criminal networks as demonstrated by the following four arguments.

First, it can be argued that a small scale organization or network with a few individuals is quite easy to dismantle by arresting all of its members in one raid. It can also seize to function as a result of a conflict with a rival criminal group. Seemingly, flatness and smallness often correlate with each other. Larger organizations with larger membership are less likely to fall that easily because law enforcement entities might be unable to destroy the entire organization at once. Moreover, criminal networks composed of "loosely coupled" and highly compartmentalized cells are most difficult to dismantle due to larger complexity of their operations and thus they become most resilient to disruption.[144]

Second, it can be argued that compartmentation can damage resilience as much as it can help it. I tis important to realize that compartmentation can reduce flows of information within the network. Poor sharing of information, or the lack o fit, can subject a criminal organization to variety of operational hazards. When inidividual cells within an illicit network fail to share information and intelligence concerning hostile law enforcement acivities, members of the network can be arrested, their merchandize can be seized or their assests might be confiscated.[145] Failure in coordination among compartmentalized cells could result in situation when different cells take offensive action against other cells in the same network thinking they are in fact targeting competition instead of their own partners.[146]

Third, illicit networks quite frequently suffer from poor decision-making and excessive risk-taking. More hierarchical networks can turn into flatter networks as a result of a leadership removal. This can result in younger, but less experienced leadership. Young leaders might have a higher propensity for violence due to their lack of experience in nonviolent dispute resolution tactics. Drug use, eccentric lifestyle, desire to make their mark in illicit worlds and other character feats among new and young illicit network leaders can also lead to erratic, impulsive and violent decisions and the failure of new illicit networks.[147]

Fourth, there is a limited scalability in illicit networks. The ability to expand in size, resources and capabilities through lateral relationships may be overrated as a process towards higher resilience. Social trust and ethnic or kinship ties have proven necessary in securing sustainable scalability. Without these ties illicit groups often splinter if they try to expand themselves too far.[148]

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[144] Weick, "Educational Organizations".
[145] Kenney, *From Pablo to Osama*.
[146] Charles Bowden, "The Sicario: A Juárez Hitman Speaks," April 28, 2009. https://variousenthusiasms.wordpress.com/2009/04/28/the-sicario-a-juarez-hit-man-speaks-by-charles-bowden-harpers/.
[147] Felbab-Brown, *Shooting Up*.
[148] Luis Astorga, *Seguridad, traficantes y militares. El poder y la sombra* (México DF: Tusquets, 2007).

Structural Resilience in Hierarchies

Hierarchies survived and became the dominant governance structure in the international system, which is due to several reasons. First, hierarchies have a capacity to organizing substantial resources. Militaries are the quintessential hierarchies, with rigid structures represented by openly displayed ranks. Despite the fact that militaries can be fraught with bureaucratic inefficiencies, they can be some of the most remarkably efficient and resilient institutions. Hierarchies provide clear command and control over the organization and clearly understood divisions of labor.[149]

Second, all hierarchies have the ability to network themselves. To continue with the military example, An officer in a theater of war does not need to ask superiors all the way up to his President, or other commander in chief, to order an artillery strike against enemy positions. Instead, he can radio a target coordinations to a central communications hub and then corresponding artillery unit or air-support is contacted to execute the fire mission. Hierarchies can network themselves through standard operating procedures within more generalized rules of engagement.[150]

Third, resilience in hierarchies is partially given by their clear lines of succession. In a situation when a leader is removed or killed, his replacement is immediately known and the hierarchy is therefore able to regenerate quickly. Hierarchies begin to malfunction only under sustained duress or coordinated attacks. Privette observes that the *Cosa Nostra* was a resilient network because of its hierarchical structures. It had clear lines of succession when leaders were removed or killed and their replacements were ready to assume the command. Only in situations when the larger network was targeted for disruption at the same time could the authorities claim to disrupt *Cosa Nostra*, despite the fact it continues to exist in much more limited fashion.[151]

Fourth, collective action problems in hierarchies can be solved through centralized command structures. Taking advantage of their hierarchical organization states can tax and invest in infrastructure which markets do not provide on their own. Charles Tilly argues that states in Europe were actually founded on their ability to wage war and collect taxes.[152] Even nowadays with still increasing privatization of security, most private military and security contractors compete for state contracts rather than seeking self-funding sources like controlling oil fields or diamond mines.

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[149] John P. Sullivan, "Transnational Gangs: The Impact of Third Generation Gangs in Central America," *Air & Space Power Journal*, June 1, 2008, http://www.au.af.mil/au/afri/aspj/apjinternational/apj-s/2008/2tri08/sullivaneng.htm; Thomas X. Hammes, *The Sling and the Stone: On War in the 21st Century* (St. Paul, MN: Zenith Press, 2004); Arquilla and Ronfeldt, *Networks and Netwars.*

[150] Jones, "The State Reaction".

[151] William Heath Privette, "Organized Crime in the United States: Organizational Analogies for Counterinsurgency Strategy," (Master's thesis, Naval Postgraduate School, 2006).

[152] Charles Tilly, *Coercion, Capital, and European States, AD 990-1990* (Cambridge, Mass., USA: B. Blackwell, 1990).

Weaker Structural Resilience in Hierarchies

It is also important to point out that hierarchies can lack adaptability in some cases. First, rigidly enforced standard operating procedures might not be optimal in certain situations.[153] Situation might develop to the point when established rules of engagement restrain soldiers in the field and can produce circumstances harmful to themselves as much as to their mission. In cases such, adjusting rules of engagement is necessary. This process sometimes requires the commander‘s approval and usually plenty of time as well, since the information must be first processed upward and then the command decisions and new strategies must proceed downward to soldiers in the field.[154]

Second, many hierarchies tend to have deeply ingrained institutional biases that complicate adaptation and learning. Authors like Nagl or Downie demonstrate how the US Army’s conventional war bias resulted in refusal to learn from its unconventional war experience in Vietnam and use it as a lesson learned in future conflicts.[155]

Operational Level Analysis: The Domestic Structure of Illicit Networks

The next level of analysis examines the interaction between the state authority and illicit networks. Astorga and Shirk define “complicity,” “confrontation” and “tolerance” as the types of relationships traffickers can have with a state and make policy suggestions accordingly.[156] Analyzing the municipal level of Tijuana police and organized crime Sabet reaches similar conceptualizations as he categorizes the relationship between organized crime and local law enforcement as “collusion,” “confrontation” or “tolerance” in Tijuana.[157]

In comparison, Gootenberg portraits a more complex picture of the relationship between the state and drug traffickers, where the relation looks more symbiotic than the zero-sum idea that governments ban and fight illicit narcotics and that evil narcotics dealers in turn subvert states and rule of law. Much has been written on this topic since drug-focused literatures are characteristically state-centric. Local U.S. police department, with diminishing federal aid, can live off proceeds of confiscated drug dealers property, with scant concern for the constitutional due process for the policy’s victims. Similarly, Anglo banks in Miami or Houston are relatively immune from legal prosecutions.[158] In other words, while most states have rather strict counter-narcotics policies, they might actually benefit from their trade on some occassions.

Similarly, Menno Vellinga observes varying relationships between traffickers and the state which include more complex symbiotic relationships. Vellinga identifies cartel strategy among the most significant factors explaining the relationship between traffickers and the state. Describing the Medellín cartel’s confrontational relationship which challenged Colombian

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[153] Robert O. Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy* (Princeton, NJ: Princeton University Press. 2005).
[154] Richard Duncan Downie, *Learning from Conflict: The U.S. Military in Vietnam, El Salvador, and the Drug War* (Westport, CT: Praeger, 1998).
[155] Nagl, *Learning to Eat Soup With a Knife*.
[156] Nagl, *Learning to Eat Soup With a Knife*.
[157] Daniel M. Sabet, ”Confrontation, Collusion and Tolerance: The Relationship Between Law Enforcement and Organized Crime in Tijuana,“ *Mexican Law Review* 2, no. 2 (2010).
[158] Schendel, *Illicit Flows and Criminal Things*, 111.

political elites, he compared the Cali cartel's focus on corrupting the state, while maintaining the ability to react to the state with violence.[159]

After the large Colombian drug trafficking enterprises were dismantled by the state, the empty space was filled by smaller, lower profile informal trafficking groups with looser connections, which took over the drug trafficking from the Andes to Europe and North America. Another aspect Vellinga assessed was the internal structure for these organizations in terms of size and business practices. He observes that the larger organizations continue to flourish in Mexico and they tend to respond to the government's efforts to supress them with more violence than those smaller organizations and networks, which Garzón refers to as "cartelitos."[160]

Chestnut takes an interesting perspective on the symbiotic relationship of profit-seeking illicit networks and the state power by analyzing the motivation of the North Korean regime to engage in state sponsored illicit activities, and when the state began outsourcing to illicit networks like the Chinese Triads. She described how North Korean regime moved toward the use of illicit activities in moments of economic desperation and weakened domestic political control. For Chestnut, North Korean illicit economic activities including counterfeit dollars, counterfeit cigarettes, opium cultivation and narcotics trafficking were key mechanisms used for the regime's survival.[161]

Using the specific cases of Mexiko and Burma to study relationship between the state and drug trafficking organization, Snyder and Duran Martinez offer a political-economic argument which suggests that Mexico's increase in drug related violence in recent years is due to the decentralization of the Mexican security apparatus in combination with the decentralization among Mexico's drug trafficking organizations and Mexico's won proces of democratization. Democratization and decentralization weakened the state's ability to negotiate with traffickers because it cannot make credible long term promises.[162]

Strategic Level of Analysis: Globalization and Illicit Networks

The last category of the scholarly literature review focuses on publications which analyze the illicit network structures which benefit from the increasingly globalized international system. They challenge the essential building block of the international system, "the territorially sovereign state,"[163] its prospects, its dependence on borders and the basic premise that it has "a monopoly on the legitimate use of force."[164] Some, like Schendel, argue that "illicit flows" and "borderlands" erode the reality and the concept of "the territorially sovereign state."[165] Others, like Andreas, argue that the state's response to illicit networks

[159] Menno Vellinga, *The Political Economy of the Drug Industry: Latin America and the International System* (Gainesville: University Press of Florida, 2004); Garzón, *Mafia & Co*.
[160] Vellinga, *The Political Economy of the Drug Industry*.
[161] Sheena Chestnut, "Illicit Activity and Proliferation: North Korean Smuggling Networks," *International Security* 32, no. 1 (Summer 2007); Sheena Chestnut, "The ´Sopranos State´? North Korean Involvement in Criminal Activity and Implications for International Security," (Honor thesis, Center for International Security and Cooperation Honors, Stanford University, 2005).
[162] Angelica Duran-Martinez and Richerd Snyder, "Does Illegality Breed Violence? Drug Trafficking and State-sponsored Protection Rackets," *Crime, Law and Social Change* 52, no. 3 (March 2009): 253–273.
[163] Hendrik Spruyt, *The Sovereign State and Its Competitors* (Princeton, NJ: Princeton University Press, 1994).
[164] Max Weber, *From max Weber: Essays in Sociology* (New York: Oxford University Press, 1946).
[165] Willem van Schendel, *The Bengal Borderland: Beyond State and Nation in South Asia* (London: Anthem Press, 2005); Spruyt, *The Sovereign State and Its Competitors*; Schendel, *Illicit Flows and Criminal Things*.

serves to reinforce it. Adler and Schendel present models to conceptualize state pressure on orders which can be combined with our understandings of the internal organizational structures of these networks to provide a better understanding of the structure and resilience of these networks at multiple levels of analysis.[166]

Building upon Lupsha's views, Fukumi perceives transnational organized crime as a feature of an international capitalist market economy where the key motivation is to maximize profits with minimum risk.[167]

Effects of Globalization

Globalization consists of complex processes which possess key characteristics majority of social scientists agrees on: (1) the spread of markets, (2) privatization and deregulation, (3) the spread of human rights, and (4) the spread of democratic values.[168] Most authors agree that the current period is not the first era of globalization. Starting with the opening of silk roads, which connected east and western civilizations, nation states in the 19th century expanded markets and resource extraction world-wide through colonialism.

In *Power and Interdependence* Keohane and Nye described "complex interdependence" during the 1980's and argued that the processes had begun in the aftermath of the World War II.[169] The current epoch intensified after the fall of the Soviet Union, the opening of the eastern bloc states and their economies, the failure of communism to provide a viable alternative to capitalism,[170] and the advancement in communications technologies.[171]

Many authors have pointed out positive aspects of globalization, but others like Naím have brought attention to the "dark side of globalization" manifested by illicit networks.[172] Particularly in Latin America the middle classes are under intense pressure resulting from competition with cheap Chinese labor, which benefits from currency manipulation.[173] Grayson described how globalization created conditions for cheapening of communications technologies, which exposed the disadvantaged youth in developing states to the extreme opulence globalization occassionally provides, which is legally unattainable for these impoverished youngsters without education.[174] Such situation increases their sense of "relative deprivation" and raises the likelihood for them to join drug trafficking organizations in an attempt to gain the wealth they have been exposed to.[175]

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[166] Schendel, *Illicit Flows and Criminal Things*.
[167] Sayaka Fukumi, *Cocaine Trafficking in Latin America: EU and US Policy Responses* (Hampshire: Ashgate Publishing, 2008).
[168] Amy Chua, *World on Fire How Exporting Free Market Democracy Breeds Ethnic Hatred and Global Instability* (New York: Anchor Books, 2004).
[169] Robert Owen Keohane and Joseph S. Nye, *Power and Interdependence* (London: Longman, 2001), 3.
[170] Francis Fukuyama, *The End of History and the Last Man,* (New Your, NY: The Free Press, 1992).
[171] Thomas L Friedman, *The World is Flat: A Brief History of the Twenty-First Century* (New York: Farrar Straus and Giroux, 2007), 1.
[172] Moisés Naím, *Illicit: How Smugglers, Traffickers, and Copycats Are Hijacking the Global Economy* (New York: Doubleday, 2005).
[173] Geoffrey Garrett, "Globalization's Missing Middle," *Foreign Affairs* 83, no. 6 (2004).
[174] George W. Grayson, *Mexico: Narco-Violence and Failed State?* (Piscataway, NJ: Transaction Publishers, 2009).
[175] Ted Robert Gurr, *Why Men Rebel*, (Princeton: Princeton University Press, 1970);
Ted Robert Gurr, *Minorities at Risk: A Global View of Ethnopolitical Conflicts* (Washington DC: United States Institute of Peace, 1993).

Weak State Authority and Alternative Governance

Gambetta views the state as a protection racket.[176] Tilly seconds this argument in his analysis of the rise of the modern state in Europe, where he observes that "war made the state and the state made war."[177] Clunan and Trinkunas argue that weakening or failing states become gradually challenged by "alternate governance structures" such as organized crime, corporations, which can arise to fill the gap or exploit the state's weaknesses.[178] The subsequent paragraphs summarize ideas of some of the key authors who have addressed the issue of weak states and the rise of organized crime.

According to Skaperdas organized crime arises to provide protection where there is a vacuum of state authority. Analyzing the conditions under which warlordism arises he has provided extensive descriptive formal models on the phenomenon. Various mafia-style entities can also be perceived as alternative governance structures. They are typically organized along hierarchical lines according to Skaperdas's analysis of the American *Cosa Nostra* and similar organized criminal groups. These organization arise or become stronger when state authority is weak eventhough they provide protection at much higher costs than we normally associate with modern governance.[179] Skaperdas demonstrates, and many other scholars agree, that by implementing prohibitionist policies state chooses to remove some of its own power to regulate flows of illicit commodities. The basis of illicit drug trafficking is the prohibition regime represented by the almost 50 years long War on Drugs declared by President Nixon in 1971.[180] Chabat argues that the complexities as much as the costs of the drug war can be significantly reduced if legalization, medicalization or decriminalization policies were implemented in drug consuming states, which would allow for the authorities to focus on drug consumption not as a criminal but rather as a public health issue.[181]

In a similar fashion Andreas argues that states repeatedly engage in increased border enforcement in order to appease domestic constituencies. The nature and location of the trafficking of labor and drugs shifts in response to increased enforcement and complicates the task of law enforcement agencies enforcing the borders. In Andreas's view global prohibition on drugs is the root cause of trafficking as much as it is responsible for the discord between neoliberal economic policies and the prohibition of the free flow of labor and illicit goods.[182]

Illicit Network Resilience

The term "illicit networks" represents a large variety of entities from terrorist networks like *Al Qaeda* to Mexican drug trafficking organizations like the Sinaloa cartel, prison gangs like the Aryan Brotherhood and street gangs like *MS–13*.[183] Illicit networks represent a threat

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[176] Garzón, *Mafia & Co*.
[177] Charles Tilly, "War Making and State Making as Organized Crime," in *Bringing the State Back,* ed. by Peter B. Evans, Dietrich Rueschemeyer, and Theda Skocpol (New York: Cambridge University Press, 1985); Tilly, *Coercion*.
[178] Anne Clunan and Harlod Trinkunas, *Ungoverned Spaces: Alternatives to State Authority in an Era of Softened Sovereignty* (Stanford, CA: Stanford University Press, 2010).
[179] Skaperdas, "The Political Economy of Organized Crime"; Skaperdas, "Cooperation, Conflict, and Power".
[180] Peter Andreas, *Border Games: Policing the U.S. – Mexico Divide* (Ithaca: Cornell University Press, 2001).
[181] Bailey and Chabat, *Transnational Crime*.
[182] Andreas, *Border Games*.
[183] Chabot, "An Historical Case Study"; Peter Andreas, "Redrawing the Line: Borders and Security in the Twenty-First Century," *International Security* 28, no. 2 (Fall 2003): 93; Raab, "Dark Networks as Problems".

to the states‘ security by directly challenging the authorities, governance and explicit legal norms. Globalization has strenghtened illicit networks, profit-seeking illicit networks in particular, by offering advanced communications technologies to private entities and increasing economic interdependence to the international state system.[184] Nation states have allocated substantial resources in their effort to supress and dismantle these networks to limited effect thus far.[185] Observing and analyzing this effort some important questions arise, specifically how do illicit networks, and PSINs in particular, structure themselves to achieve such a high level of resiliency; what is the best strategy to suppress them; and also why nation states tend to attack some illicit networks rather than others?

Extensive body of scholarly literature considers illicit networks to represent a substantial security threat and identifies the network structure as critical element in understanding why these networks survive in their operational environment. For instance, Arquilla and Ronfeldt argue that flatter structures without explicit leader, or with a leadership consisting of several individuals, will be more resilient and more likely to survive because these types of structures are less impacted when their leadership is eliminated.[186] It is worth mentioning that illicit networks must deal with severe threats to their survival. There is the state authority with its ability to eliminate leadership figures as a regular constant in this line of entrepreneurial activity. There is a threat of violent competiton from rival networks, which try to enforce and expand their market shares in the illicit business world.[187]

The following pages explain, the relationship between the structure of profit-seeking illicit networks, defined in terms of degree of hierarchy (independent variable), and their resilience (dependent variable).[188] At the beginning there are two key hypotheses: (1) flatter structures would increase resilience; and conversely, (2) more hierarchical structures would reduce resilience.

In the course of his research, Nathan Patrick Jones identified the PSIN’s business strategy as a key explanatory variable and founded his argument of profit-seeking illicit network‘s resilience on how the state reacts to PSINs on its territory.[189] Jones argues that when illicit networks fragment, they tend to do so along the lines of varying business strategies. In cases when those business strategies are territorial or extortion-based in nature, the state, civil society and rival illicit networks unite against them in order to eliminate the threat they represent to the business and security environment.[190]

Individual nation states usually maintain significant potential economic advantages over PSINs, but they can only mobilize them when the states‘ political will and social outrage are united against illicit networks. In case of Mexico, its GDP is somewhere around 1 trillion

[184] Naím, *Illicit.*
[185] Max G. Manwaring , *A Contemporary Challenge to State Sovereignty: Gangs and Other Illicit Trafficking Organizations in Central America, El Salvador, Mexico, Jamaica and Brazil* (Carlisle, PA: Strategic Study Institute, 2007): 59; Max G. Manwaring, *Street Gangs: The New Urban Insurgency* (Carlisle, PA: Strategic Study Institute, 2005); Max G. Manwaring, *A “New” Dynamic in the Western Hemisphere Security Environment: The Mexican Zetas and Other Private Armies* (Carlisle, PA: Strategic Study Institute, 2009).
[186] Arquilla and Ronfeldt, *Networks and Netwars.*; Arquilla and Ronfeldt, *The Advent of Netwar.*
[187] Kenney, *From Pablo to Osama.*; Kenney, “The Architecture of Drug Trafficking“; Bailey and Chabat, *Transnational Crime*.
[188] Kenney, *From Pablo to Osama*.
[189] Jones, “The State Reaction“.
[190] Ibid.

dollars, while estimated total profits from drug trafficking are approximately at 18-39 billion dollars.[191] With properly organized and funded security institutions, the Mexican state should be able to defeat profit-seeking illicit networks in country. An attempt will be made here to explaining why the Mexican state and nation states in general tend to target some profit-seeking illicit networks and not others.

Typology of Illicit Networks

Jones identifies three ideal types of illicit networks: (1) insurgent, (2) transactional, and (3) territorial profit-seekers:

The Insurgent Network

The insurgent type network is characterized by insurgency, which is defined in general terms as a political movement attempting to topple a state through the unconventional use of force. This type includes both *Al Qaeda,* and other similar terrorist groups, which uses terrorism as a logic of action, as well as more traditional insurgencies that perceive terrorism as a method of action while retaining their mass base of support. In defining insurgent illicit networks the presence of political ideology is an essential, but not a unique characteristic, since this type includes religious and ethno-nationalist networks.

Qualitaively, the relative significance of the political ideology must be assessed in relationship to the illicit network's commercial activities on a case-by-case basis. Quantitatively, the relative strength of various cells is also important to the evaluation of insurgent type of illicit networks. Yet this dissertation focuses on profit-seeking networks, not the insurgent type.

Insurgency directly threatens the state since insurgents aim to overthrow the state authority through the use of violence thus effectively challenging the state's monopoly on the legitimate use of force.[192] Insurgent networks seek to delegitimize the state by questioning its sovereignty, which is the main reason for state's attack on insurgent networks.[193] A particular model of the state authority, democratic or authoritarian, is largely irrelevant to a severe state response to an insurgency. Instead the insurgency's success will be more dependant on its strength versus the power of state authority. In comparison, the state's interaction with predominantly profit-seeking illicit networks is far more complex and therefore the question why the state attacks some profit-seeking illicit networks and not others is more complicated.

2.4. Illicit Business Models

Profit-seeking illicit networks generally deploy one of the two types of business strategy: "transactional," or "territorial".[194] Relying on sophisticated businessmen, and college graduates in general, the transactional business strategy focuses primarily on trafficking, avoids unnecessary violence and seeks to maintain a low operational profile. In contrast, the territorial business model focuses primarily on taxing the territory the PSIN's control. Territorial networks also engage in smuggling narcotics, but they further diversify into other areas of

[191] "Mexican Drug War Fast Facts," *CNN Library*, updated February 15, 2019. https://edition.cnn.com/2013/09/02/world/americas/mexico-drug-war-fast-facts/index.html.
[192] Weber, *From max Weber: Essays in Sociology*.
[193]Stephen D. Krasner, *Sovereignty: Organized Hypocrisy* (Princeton, NJ: Princeton University Press, 1999).
[194] Jones, "The State Reaction".

criminal activities such as human trafficking, kidnapping, extortion, arms trafficking, taxation of other organized illicit activities on their territory, etc. These two models with their respective characteristics represent the ideal types and real world illicit networks can be often perceived as being on different points along the continuum between the extremes representing ideal types according to the proportion of various activities conducted as part of the network's business.

The Transactional PSIN Type

In its ideal form, the transactional profit-seeking illicit network focuses exclusively on the business of drug trafficking and laundering the corresponding profits.[195] Transactionally operating smugglers tend to hide their wealth behind legitimate front businesses. In its extreme manifestation a transactional network is a single, flat, trafficking or money-laundering unit with only one layer of management. Transactional PSINs are the most difficult to identify and examine because they can project entirely licit public appearance.

Transactional PSINs usually aim to corrupt higher levels of government, targeting top tier officials. They also tend to be selective in their use of violence, which is mostly perceived as a tool to fend off rivals and not directed at local population. Naturally, even transactional illicit PSINs display some territorial characteristics due to their need for specific trafficking routes, but they do not target local population in order to extort money, although they do extort local other illicit actors while trafficking drugs through the region.

When bribing authorities, transactional PSINs aim to bribe top level officials in the military or federal police, while territorial PSINs focus more on state and local police since they are more likely to interact on municipal level. Following the logic of this argument, the arrest of illicit network members is expected to be higher among territorial PSINs that are unable to establish relationships with the state authority because of their often times excessively violent territorial business strategies. To continue with this logic, members of transactional PSINs should be arrested at lower rates and should bribe higher level government officials.

Although transactional PSINs may effectively dominate a territory, they do not make profits through the predatory extraction of taxes from that particular area. Instead, they rather profit from trafficking illicit drugs through the territory. They might implement some form of taxation for this service, but that taxation normally does not extend into the licit world. In contrast, territorial PSINs possess a comparative advantage in the provision of violence and extract taxes from their territory. As a result, territorial PSINs tend to utilize territory in a more predatory fashion. Transactional PSINs in Mexico might also assist local legitimate enterprises in exchange for *piso*. These are not extortion schemes per se, but actual business services including the obtainment of government permits, protection from bribe-seeking police officers, business network connections and many other potential forms of assistance.[196] The violent externalities generated by transactional PSINs are located primarily in consumption states and among drug-abusers in the transit country. These externalities are not inherently violent, but rather corrosive of democratic institutions and the rule of law.

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[195] Weber, *From max Weber: Essays in Sociology.*

[196] Nathan Patrick Jones, "InSight: Report Tracks How Intra-Cartel Wars Exploded in Mexico," *InSight Crime*, February 9, 2011, https://www.insightcrime.org/news/analysis/insight-report-tracks-how-intra-cartel-wars-exploded-in-mexico/.

The Territorial PSIN Type

In a fashion similar to the state itself, territorial PSINs focus on controlling a territory that can generate profit through taxation. While these profit-seeking illicit networks traffic narcotics through territory under their control, they may also impose taxation on other traffickers using their *plaza*, use extortion, kidnapping or tax legal and illegal businesses in order to generate extra profit. Generally, territorial PSINs often expand and further diversify their activities. These territorial networks display more hierarchical structures because they must protect their territories to prevent other smugglers from trafficking in the area without paying the fee. In consequence, they need more enforcers and managers. For territorial PSINs, the primary source of revenue is the control of taxable territory.[197] The negative externalities generated by territorial PSINs have impact primarily in the domestic context through violence and extortion.

Instrumentally, territorial PSINs use violence to demonstrate that the state authority lacks effective control over territory and is therefore incapable of governing. Alternatively, they use it to send messages to their competition in the illicit business. They exercise symbolic violence often using arranged mutilated bodies with *narco-mensajes* to convey messages to rival traffickers, state agencies and also to the local population. They tend to stage public violent acts, which do not result in profits, the sole purpose is to demonstrate a lack of government control.[198]

Structurally, PSIN's business strategy is determined by its structure and degree of hierarchy, business knowledge and connections, business acumen, comparative advantages in violence and other characteristics of the individuals comprising the illicit network. In a way, PSINs often do not choose business strategy consciously, rather they intend to exploit certain advantages they possess. The business strategy has certain level of interconnectivity with degree of hierarchy in PSINs because the high number of enforcers to supervise a territory requires higher number of managers and therefore more degrees of hierarchy.[199] In consequence, territorial PSINs tend to display higher levels of their organizational hierarchy, whereas transactional PSINs tend towards flatter hierarchies.

Among the most demanding tasks territorial PSINs face is to gather enough enforcers to exercise effective control over their territory. Selection and training process for enforcers centers on the same qualities as the selection process in the police and military emphasizing hierarchy and discipline. In deployment of enforcers the PSINs tend to replicate the structure and style of organization from which they buy training and know-how by means of corruption, that is the police, military and mercenaries. In order to maximize profit, transactional PSINs can employ limited number of highly trained and skilled individuals to prevent further expenses, it can corrupt the state apparatus to buy hierarchy. They can subcontract additional labor whenever the necessity arises.

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[197] Tilly, *Coercion*.
[198] Steve Fainaru and William Booth, "Widespread Oil Theft by Drug Traffickers Deals Major Blow to Mexico's Government," *Washington Post*, December 13, 2009, http://www.washingtonpost.com/wp-dyn/content/article/2009/12/12/AR2009121202888.html.
[199] David Easton, *A Framework for Political Analysis* (Englewood Cliffs, NJ: Prentice-Hall, 1965); Klotz and Lynch, *Strategies for Research*.

Majority of Mexican PSINs has at least five layers of management and they usually represent central nodes in wheel networks.[200] Despite the fact that PSINs with the same level of hierarchy can be found selecting both business strategies, transactional PSINs with multiple layers of management tend to be more robust in size than similarly structured territorial PSINs. For instance, the Sinaloa cartel represents primarily a transactional type network in character but uses many intermediaries to protect the core members within the network. Arguably, it has a higher level of hierarchy, which is due to its vast size in comparison to other PSINs in Mexico.[201] Transactional PSINs usually increase degree of organizational hierarchy in response to challenges raised by territorial PSINs, rather than opting to increase their hierarchy in a vacuum.[202]

Despite clearer distinctions in the theoretical concepts, most of real world PSINs represent hybrids between the territorial and the transactional types with varying proportions of each category. The table below represents a comparison of key business strategies in territorial versus transactional PSINs.

Business Strategy in 26 Areas	**Territorial Traffickers**	**Transactional Traffickers**
1. Treatment of Territory	Focus on control and taxation of territory	Emphasis on trafficking over territorial control
2. Degree of Hierarchy	More hierarchical due to need for enforcers	Flatter structures, but can be hierarchical. A smaller number of highly sophisticated individuals
3. Profile	Flashy lifestyle (Gold Plated Guns)	Lifestyle low profile (No conspicuous consumption). Or lifestyle is explained by front-businesses
4. Extortion as a source of profit	Extortion of illegitimate and legitimate businesses used *en masse.* Extortion of petit bourgeoisie.	Extorts illicit businesses but profits mostly from trafficking drugs. Establishes norms of paying *piso* extortion tax regularly for illicit businesses.
5. Kidnapping	Kidnappings of citizens uninvolved in underworld. Lower intelligence on targets. Targets held for short periods of time.	Kidnappings limited to enforcing drug debts and those involved in crime. Sometimes utilized when network is profit starved always high profile targets.
6. Violence against police	Killing police officers in large numbers	More emphasis on corrupting police or evading altogether. Pays off high level commanders.
7. Use of symbolic violence	Symbolic violence use very heavy. Cutting off heads. Youtube.com postings, public hangings of bodies from bridges.	Focus on bribery of officials over symbolic violence or threats but will use symbolic violence in confrontations with territorial traffickers.
8. Political campaigns	Some funding of local political campaigns	Greater funding of political campaigns especially the federal and state levels, but also local.

[200] Jones, "The State Reaction".
[201] Richard Marosi, "Flying High for the Sinaloa Drug Cartel," *Los Angeles Times*, July 27, 2011, https://www.latimes.com/local/la-me-cartel-20110727-story.html.
[202] Jones, "The State Reaction".

9. Management	Typically younger leadership often more violent (Ephemeral)	Experienced managers. Typically have or hire some business, law, accounting degrees, etc.
10. Use of enforcers	More enforcers	Fewer enforcers more smugglers and intelligence. Enforcers focus on bodyguard and security operations.
11. Size	Larger organizations in terms of numbers of individuals involved	Large organizations but higher profit margins due to relative numbers involved
12. Violence toward society	More violence toward society and rival traffickers. More likely to have street gun battles and come into conflict with police or local turf battles.	Less violence toward society, some violence directed at rival traffickers, more likely to use intelligence to tip state security apparatus off to rivals.
13. Where profit comes from	Profits primarily from: Kidnapping/extortion and taxing small smugglers for use of territory	Profits from trafficking drugs, money laundering, financing drug production, high profile kidnap victims, legitimate businesses, front-businesses, government contracts, etc.
14. Retail drug sales	More retail drug sales in their territory	Fewer retail drug sales in their home territories
15. Domestic use of street gangs	More use of local street gangs domestically	Lower use of local street gangs domestically
16. Crime rates	Higher crime in areas controlled by these groups	Lower crime rates in areas controlled by these groups
17. Corruption/Bribes	Tend to bribe lower levels of government (Local Cops)	Tend to bribe higher levels of government (Federal/State)
18. Adaptability	Less adaptable in smuggling methods but able to diversify activities to compensate.	Highly adaptable in smuggling methods.
19. Alliance Stability	Fewer alliances; less stable. More likely to annex local street gangs and change their identity.	More alliances with other groups. Alliances more stable and based on business interests. More likely to create "federations" with other transactional cartels.
20. Trafficking Method Sophistication	Sophistication of trafficking dependent upon smuggling group being taxed	More sophisticated trafficking methods, sea-submersibles, ventilated tunnels, air transport, all of which may require large initial investments, etc.
21. Capital Reserves	Less capital reserves resulting in a diversification of criminal activity to cover overhead of enforcers when drug profits drop due to market forces or border enforcement.	Greater capital reserves, less need to diversify criminal activity.
22. Violence toward state, society and political elites	Highly violent threat to state, society and political elites	Lower violent threat to state, society and political elites. Dangerous corrupting influence
23. Investment in local population	Invest heavily in local population	Invest heavily in local population and central government corruption
24. Use of Firepower	Heavy emphasis on firepower	Lower emphasis on fire power
25. Assassination Strategies	Random assassination strategies (Bounties for killing any police officers, etc.)	Strategic assassinations targeting specific high ranking individuals for specific reasons

26. Terror Bombings	More likely to engage in terror bombings	More likely to ally with state than use terror

Table 1: **Territorial Versus Transactional Business Strategies by Nathan Patrick** Jones, (Nathan Patrick Jones, "The State Reaction: A Theory of Illicit Network Resilience," (PhD. Diss., University of California, Irvine, 2011), 83–84.)

Definition of Structural Resilience

Resilience can be described as "the ability to survive a disruptive event."[203] Drug trafficking PSINs with international business operations face disruptive events potentially on daily basis. For instance, the elimination of key leadership figures through apprehension, arrest or even killings can destabilize an organization just as seizures of large drug shipments can cause financial bankrupcy of PSIN's core nodes. It is insufficient to recognize that disruptive events are almost inevitably occuring feature in a life of this type of PSIN. It is important to define the variable as well as the circumstances under which a network can be shown to be more or less resilient, even if only *ex-post facto* evaluation of disruptive events is available.

In existing literature resilience is mostly treated as a simple either-or variable; the organization inspected either survived or it did not, and this represents a significant conceptual weakness as much as problematic gap in theoretical framework.[204] Instead, there is rather a significant degree of variance between levels of survival. Just like individuals in cases of traumatic events, networks and hierarchies have different responses to disruptive events displaying various levels of resilience.[205]

In order to include variance and increase validity of the concept it is essential to better formulate and explain the variable. Nathan Patrick Jones contributes to the existing scholarly literature by introducing a continuum based typology of levels of resilience.[206] Jones identifies four basic types:

1. *Surviving Intact* represents the highest level of resilience, when after a disruptive incident an organization is able to survive in its original form without requiring major reorganization. This level is mainly characterized by *contingency theory* designs, which claim that organizations maintaining highly adaptive structures as a matter of their standard operating procedure will be most adaptable and therefore resilient. In these settings, any reorganization in response to a disruptive incident is therefore a regularly occuring process and as such does not represent a major restructuring of the organization. Adaptivity represents the main advantage of these amorphous organizations, at the same time they can be less successful in responding to predictable threats that a more solid hierarchy is capable of combating very efficiently.[207]

2. *Restructuring* represents the second highest level of resilience, when a disruptive incident results in the need to restructure. An organization might recognize internally that major reconstruction is essential to withstand similar events more successfully or to prevent them from occuring in the future. Alternatively, restructuring can be the result of a substantial

[203] Chabot, "An Historical Case Study".
[204] Chabot, "An Historical Case Study".
[205] Ibid.
[206] Ibid.
[207] Hy S. Rothstein, *Afghanistan and the Troubled Future of Unconventional Warfare* (Annapolis, MD: Naval Institute Press, 2006).

disruption within the organization. In case of Mexican PSINs disruptive incidents can include apprehension, arrest or killings of key management figures. This type of events can subsequently force a restructuring of PSINs, or even a violent fragmentation of the illicit network.[208]

3. *Fragmentation* represents a lower lever of resilience than orderly restructuring and it applies to situations when disruptive incident leads to an internal splitting of the PSIN into smaller segments. This fragmentation usually occurs along functional lines within the organization.[209] Such fragmentation usually takes a violent forms of internal conflict with various factions within the organization fighting for overall control of the enterprise.

4. *Dissolution* represents the lowest level of resilience, when central nodes within the network, or potentially entire PSINs, can be dissolved. Such an outcome can be caused by a complex and sophisticated law enforcement operations directed at dismantling a node or network as demonstrated by various historical examples of effective operations directed at organized crime networks in the United States.[210]

Resilience of Profit-Seeking Illicit Networks

State authority responds to different PSIN structures and business strategies differently. Predominantly territorial PSINs with business strategies emphasizing kidnapping and extortion over drug trafficking will be more likely targeted by state authority, which will effectively lower its resilience. States remain as central reference units in the international system and their relative power is proportionate to economic size, moral legitimacy and the resources they posses. Therefore, seemingly the most critical factor for PSIN's survival is its relationship to the host state.[211]

Usually, territorial PSINs require more hierarchical structures due to a fact they need more people to patrol their claimed territory. When regular profit flows decrease, territorial PSINS must diversify their criminal portfolio in order to sustain payments to its members. Often times this includes to rely on mafia style extortion activities.[212] Besides the fact that territorial PSINs represent a challenge to the logic of the territorially sovereign state, they also provoke societal backlash through their extortion activities, which prompt a resolute response from the state authority. States tend to perceive territorial PSINs as universal menace, a fact which increases the probability of cooperation among nation states against this challenge to the predominant unit within the international system.[213]

Level of resilience varies between illicit network, but none of them is perfectly resilient. PSINs in Mexico demonstrate high levels of resiliency as they continue to survive under intense state pressure. Theoretically, should there be sufficient state resources directed against PSINs, they could collapse. In practice, nation state rarely deploys the necessary amount of resources against PSINs and is seriously limited in deploying them efficiently. Decreased efficiency is

[208] Arquilla and Ronfeldt, *Networks and Netwars*.
[209] Skaperdas, "The Political Economy of Organized Crime"; Privette, "Organized Crime in the United States"; Sabet, "Confrontation, Collusion and Tolerance"; Bowden, *Killing Pablo*.
[210] Privette, "Organized Crime in the United States".
[211] Kenneth N. Waltz, *Man, the State, and War: A Theoretical Analysis* (New York: Columbia University Press, 2001); Kenneth N. Waltz, *Theory of International Politics* (Reading, Mass.: Addison-Wesley Pub. Co., 1979).
[212] Carlos Resa Nestares, *Los Zetas: de narcos a mafiosos* (Madrid: Universidad Autonoma de Madrid, 2003).
[213] Spruyt, *The Sovereign State and Its Competitors*.

partly due to PSINs business strategies which allow for a *modus vivendi* with the state through corruption.[214]

The Life Cycle of Profit-Seeking Illicit Networks (PSINs)

The figure below, describes the inputs of the various business strategies, the nation state's response to them, and the final output of the level of resilience. It illustrates how the state reaction is weak against transactional networks, which then results in the survival or reorganization of the illicit PSIN. Strength of state institutions as well as intensity of the state reaction determine Whether the PSIN survives intact, reorganizes, fragments or dissolves.

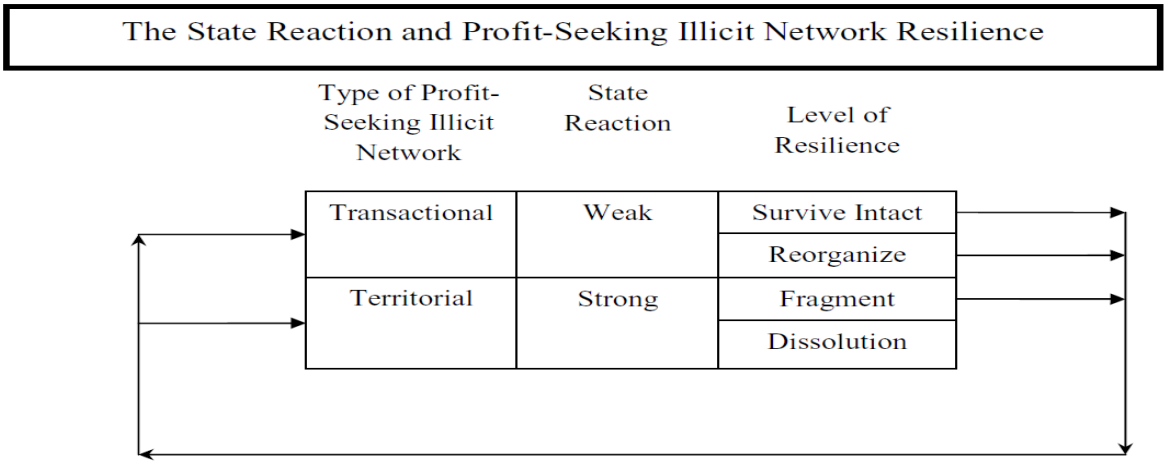

Figure 2: The State Reaction and Profit-Seeking Illicit Network Resilience by Nathan Patrick Jones (Nathan Patrick Jones, "The State Reaction: A Theory of Illicit Network Resilience," (PhD. Diss., University of California, Irvine, 2011), 28.)

Usually, large PSINs contain both territorial and transactional segments within their structures. Under attack from the state authority or competition via decapitation strikes, they tend to fragment along internal transactional and territorial lines and the process repeats. The surviving networks will then again provoke a strong or weak state reaction depending on their new business strategies and the process proceeds in an evolutionary fashion.

The lower half of the chart illustrates the path of the territorial PSINs. These PSINs provoke a stronger state reaction, which in turn reduces their resilience. Capabilities of state's security apparatus determine whether the reaction will be strong enough to dissolve or fragment the PSIN. The chart above also depicts the theory's iterative nature. Each PSINs resilience is constantly being tested in its fight or collusion with the state authority and other rival illicit networks.

The upper half of the chart illustrates the path of transactional PSINs. Depending on the state reaction against these PSINs they will be either pushed to restructure or they might survive intact. Similarly to the case of territorial PSINs, the final outcome will be heavily influenced by the quality of the security and judicial apparatus.

[214] Jones, "The State Reaction".

The theory here focuses on how the hosting state reacts to PSINs, it does not include the reaction of other states impacted by the drug trade like the consuming nations where the negative externalities of drug consumption materialize. The degree of agressivity these states deploy against territorial PSINs depends upon the how much their business strategy relies on territorial extortion. It is democratic consolidation that reduces the nation state's threshold for tolerance towards even primarily transactional PSINs. Nevertheless, with transactional PSINs forebearing extortion and violence even democratically consolidated nation states will focus primarily on territorial PSINs that engage in taxation over a given territory by means of extortion, kidnapping and murder. All of these violent activities also provoke responses from media and civil society, thus further galvanizing the states' hardline attitude to territorial PSINs.

How the Public Reaction Stimulates the State Response

Territorial PSIN violence is caused by multiple factors including young and inexperienced leadership figures, a comparative advantage in violence, and limited drug trafficking connections. They have a comparative advantage in violence because they take with them low level enforcers in their splits with larger PSINs. Their labor force makes any decision to become transactional structurally unattainable and thus they are structurally limited to the extortionist business strategy until they can establish strong transactional trafficking and political contacts.

Intra and inter-cartel conflict produces violence in form of homicides, kidnappings and generally increased crime rates, which creates an intolerable situation for society. Various interest networks within the civil society pressure the government to react against territorial PSINs for their engagement in extortions and kidnappings because these represent high impact crimes the civil society is falling victim to. It is very likely that the violence will be mostly concentrated along trafficking routes but the overall homicide rates and media attention will push national as well as local governments to respond. Once extortion and kidnappings reach into the professional classes and political elites, the critical mass of civil society will begin exerting strong pressure on the state and ask it to react. Occasionally, targeting political elites for kidnapping is enough to encourage the government apparatus against particular PSINs despite their predominantly transactional compositions as was the case of Colombia's state resolute response to the Medellín illicit enterprise in the 1990's.[215]

Often time the victims of kidnapping and extortion are among state employees, polititians and officials as much as local businessmen, which increases the state's willingness to respond to the territorial PSINs. Another important factor to realize is that state and civil society are often supported by rival PSINs which are taking advantage of additional attention brough upon their rivals and which might be in conflict with those territorial PSINs. This competition is likely composed of transactional PSINs, since their leadership is likely to have closer social ties to public officials and civil society in networks of complicity as well as genuine networks of trust and kinship.[216] Maintaining and developing this relationship between the state authorities and transactional illicit networks represents the valuable capital reserves and huge profit to membership ratios these networks can achieve to bribe public officials and the state apparatus in general. Moreover, these transactional PSINs have a clear incentive to

[215] Bowden, *Killing Pablo*.
[216] Scott, *Social Network Analysis*.

supply actionable intelligence to the state's coercive apparatus against their territorial PSIN competitors.[217]

Once territorial PSINs begin to realize that the coercive state apparatus has turned against them, they are likely to grow even more desperate in their attempts to shift that relationship. Having proportionally limited profits and lower capacity to corrupt at their disposal, they often decide to deploy terror tactics against the law enforcement and the military. This in turn causes further galvanization of the state, civil society and provokes increase in coercive response against the PSINs. With violence being the only skill in their management toolbox, territorial PSINs overhelmingly rely on bombings of police and military and symbolic violence against the general population to force both groups into submission. Facing the combined forces of the state's coercive apparatus, rivaling PSINs and sometimes foreign governments and ther supranational entities, territorial PSINs suffer from lower resilience, which results in fragmentation or possibly dissolution.

The only scenarion where territorial PSINs demonstrate higher levels of resiliency is when the state is proportionally weaker and the PSINs on the other hand strong enough to replace the state. Occurence of this particular scenario is rather rare but ultimately possible in failed states like Haiti or Somalia where territorial and insurgent PSINs assume governing characteristics and effectively replace the state.

The critically important factors here are the strength of state institutions and the level of democratic consolidation. Democratic consolidation has ameliorative impacts on the state's ability to effectively control organized crime. In comparison, weak states on the verge of failure or failed state might find themselves in a situation where extortionist PSIN might represent a viable alternative structure of governance.[218] Such cases are rare, but possible. In consolidated democracies there is much less tolerance for PSINs of any kind and the states are more likely and more willing to reach across national borders to target the PSIN's leadership. This outreach is politically feasible due to the public's support for strong anti-criminal efforts in consolidated democracies where the state is also willing to act with resolution and aggressivity and violate other state's sovereignty when their own national security is threatened through acts like targeted killings of law enforcement and the military.[219] One example of a PSIN killing a state law enforcement official is the 1985 killing of DEA agent Enrique Camarena that triggered a powerful response from the United States government. That reaction resulted in the dismantlement of the Guadalajara Cartel or the loose federation that had dominated Mexican trafficking. Moreover, state bureaucracies in all these states are also more inclined to increase and institutionalize collaboration with foreign governments when facing the threat represented by violent illicit traffickers thus increasing the spread of democratic values at the bureaucratic level.[220]

Nation states maintain the preponderance of power in the existing international system. Many states, among them Mexico, have relatively large GDPs and substantial tax bases to

[217] Kamal Sadiq, *Paper Citizens: How Illegal Immigrants Acquire Citizenship In Developing Countries* (Oxford: New York: Oxford University Press, 2009).
[218] Clunan, *Ungoverned Spaces.*
[219] Elaine Shannon, *Desperados: Latin Drug Lords, U.S. Lawmen, and the War America Can't Win* (New York: Viking, 1988).
[220] Graham T. Allison, *Essence of Decision; Explaining the Cuban Missile Crisis* (Boston: Little Brown, 1971).

bankroll their own coercive apparatuses in its mission to eliminate illicit networks.[221] But the modern states have many other social responsibilities such as providing for education, health services, pensions and infrastructure.[222] In the end, PSINs operating with proportionatelly less overal earnings than the state have actually upper hand in diverting larger resources towards intelligence collection and combating government efforts since the PSINs are free of the other social expenses that states must cover.

Rivalry Among PSINs as an Alternative Explanation

Possible counterargument to Jones's state reaction argument of PSIN resilience is that rival illicit networks may be even more relevant to destruction of other PSINs than the nation states. Such an argument would be certainly relevant to Mexico where drug-related violence strongly correlates with inter-cartel warfare. PSINs might substantially contribute to defeat of their competitors by successfully forging alliance with the state authorities. This might explain why the levels of violence across Mexico usually correlate with the deployment of the Mexican armed forces and inter-cartel warfare.[223] We can observe transactional profit-seeking illicit networks corrupting the state authority and then directing the state's coercive apparatus towards the territorial PSINs. Therefore, Jones's state reaction argument addresses rival illicit networks' impact on resilience by including corruption as intervening variable attributed to transactional illicit networks and their assistance to the state coercive apparatus.[224]

Theoretical Implications of the State Response to Profit-Seeking Illicit Networks

If territorial PSINs display lower resiliency due to the state authority's response to them, then surviving PSINs will be likely more transactional in their business model and lacking in political agenda, besides what is essential to achieve their business goals. The surviving transactional PSINs, while maintaining a lower profile, will incorporate themselves into the state apparatus and create territories of plural authority within the state largely in areas mostly related to law enforcement and trafficking routes.[225] In areas, where these PSINs will display suffcient size and strength as well ability to accumulate resources in core nodes of wheel networks is sufficient, then the PSINs will have the capability to influence both national and local politics. The key ability necessary to effectively combat these PSINs might not be the military capability, rather it will be improved and empowered judicial institutions, prison system and other related aspects of the working legal system usually associated with consolidated democracies.

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[221] Nathan Patrick Jones, "Applying Lessons from Colombia to Mexico," *Wilson Center – Mexico Institute*, December 3, 2010, https://mexicoinstitute.wordpress.com/2010/12/03/applying-lessons-from-colombia-to-mexico/.

[222] Edgardo Buscaglia, William Ratliff, and Samuel Gonzalez-Ruiz, *Undermining the Foundations of Organized Crime and Public Sector Corruption: An Essay on Best International Practices* (Stanford, CA: Stanford University, 2005).

[223] Fernando Escalante Gonzalbo, "Homicidios 2008-2009 La muerte tiene permiso," *Nexos,* January 1, 2011, https://www.nexos.com.mx/?p=14089.

[224] Jones, "The State Reaction"; John Burnett and Marisa Peñalosa, "Mexico's Drug War: A Rigged Fight?" *NPR*, May 19, 2010, https://www.npr.org/templates/story/story.php?storyId=126890838&t=1553031066490; John Burnett and Renée Montagne, "On the Trail of Mexico's Vicious Sinaloa Cartel," *NPR*, May 18, 2010, https://www.npr.org/templates/story/story.php?storyId=126894829.

[225] Clunan, *Ungoverned Spaces*.

The overall profits of PSINs enable them to fund political campaigns and influence the political system. There is an interesting observation that corruption can actually serve to limit the trafficker's ability to influence elections. In developing countries, government contracts tend to be much larger than the real costs of the given contract. A part of the markup is then directed to bankroll political campaigns in an effort to secure contracts in the future. In such design, it is actually government money funding elections, which mitigates the effects of drug money on the political processes as it decentralizes the sources of corruption. [226]

As noted earlier, states and territorial profit-seeking illicit networks are enemies, because they are so much alike. They are both territorial, hierarchical, resilient, prone to violence and funded by taxation. Thus, states will target territorial illicit networks first by reducing their resilience. Territoriality leads to the diversification of criminal activities like extortion, kidnapping, oil theft, retail drug sales all of which increase societal pressure on democratic states to eliminate the threat. For instance, by 2008 kidnappings of middle-class professionals such as doctors and engineers in Tijuana became so widespread that they threatened a strike.[227] A societal backlash reduces territorial PSIN intelligence gathering capabilities and weakens them vis-à-vis the state and other illicit networks.

Exchanging periods of PSIN's fragmentation and confrontations with the state facilitates the process of natural selection between transactional and territorial PSINs. Once illicit networks fragment along their functional lines, the resulting outcome is a fighting between newly formed territorial and transactional factions. In these circumstances, especially young and inexperienced leadership will often decide to respond to violence with further violence and in the end will face a continually increasing threat from the state.[228] If the territorial PSINs demonstrate enough strength, they will be able to endure the state's attack. If the state is sufficiently weak in the scenario, the territorial PSIN can provide a viable alternative structure of governance.[229]

With all likelihood, transactional PSINs will not fight through these conflicts undamaged, but they will have larger cooperation with the state authority through corruption and tactics focused on laying low. The surviving transactional illicit networks can even observe increase in their profits since during the fighting they have reduced the enforcer ranks and revived focus on illicit trafficking and money-laundering activities. When state institutions are strong, transactional PSINs are more resilient than their territorial counterparts because they represent a lesser challenge to the state and they are more capable of corrupting state authorities to create a mutually acceptable *modus vivendi*.[230] At the same time it is important to realize that territorial PSINs are usually larger and more hierarchically organized networks with higher capability of directly challenge the state's monopoly on the legitimate use of force.[231] Therefore, territorial illicit networks are the biggest threat to the state and, in turn, they are least

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[226] E. D. Arias, *Drugs & Democracy in Rio de Janeiro: Trafficking, Social Networks & Public Security* (North Carolina: The University of North Carolina Press, 2006).
[227] Ben Conery, "Mexican Drug Cartels 'Hide in Plain Sight' in U. S.," *The Washington Times,* June 7, 2009, https://www.washingtontimes.com/news/2009/jun/07/mexican-drug-cartels-hide-in-plain-sight-in-us/.
[228] Jones, "The State Reaction".
[229] Clunan, *Ungoverned Spaces.*
[230] David A. Shirk and Luis Astorga, *Drug Trafficking Organizations and Counter-Drug Strategies in the U.S.-Mexican Context* (UC San Diego: Center for U.S. – Mexican Studies, 2010).
[231] Weber, *From max Weber: Essays in Sociology.*

resilient when state is strong. Nevertheless, in developing states and in states during democratic transition institutions are often weak, but they often receive assistance from neighboring states in their efforts to protect their borders and fight illicit non-state actors.[232]

It is also important to realize that the territorial and transactional business strategies represent the ideal types and most PSINs contain elements of both models. Therefore, a thorough understanding of these illicit networks must be acquired by rigorously assessing their behaviors, structures as well as how strongly they correlate to these typologically ideal models.

[232] David J. Danelo, "A New Approach is Needed in Anti-Crime Fight in Mexico," *Banderas News*, December 23, 2010, http://banderasnews.com/1012/edop-fpri23.htm; Marc Lacey, "Report Says U.S. Fails to Assess Drug Aid to Mexico," *New York Times*, July 20, 2010, https://www.nytimes.com/2010/07/21/world/americas/21mexico.html?_r=1&hp.

3. ASSESSMENTS AND COUNTER-STRATEGIES

3.1. Evolution of Narcoterrorism and the Nature of the Current Drug War in Mexico

In contrast to the definition I provided in the very first paragraph of Introduction, that narcoterrorism represents "the use of excessive violence as indispensable business tactic to secure operational environment for profit-seeking illicit drug smuggling enterprise," the Drug Enforcement Agency (DEA) of the United States, focusing on the latter part of the word, provides a definition of narcoterrorism as "characterized by the participation of groups or associated individuals in taxing, providing security for, or otherwise aiding or abetting drug trafficking endeavours in an effort to further, or fund, terrorist activities".[233] The DEA's definition switches focus from narcotics to terrorist organisations, emphasizing the fact that terrorist organisations occasionally use illicit drug trafficking as a source of revenue for their activities.

Seemingly inevitable ambiguity then results in duality of meaning with varying emphasis placed on either the narcotics related dimension or terrorism. Within this context it is important to aknowledge that recognotion of the term's duality complicates rather than facilitates discussion on the two concepts involved.

Weinberg argues that terrorism conceptually suffers from 'stretching' as it is lately often attached to other phenomena, such as cyber-terrorism and narco-terrorism, which results in the risk of adopting the term to a variety of different concepts and thereby the diffusion of its definition.[234] Some authors avoid usage of term completely when contemplating the convergence between criminal and terrorist entities.[235]

Recognizing the conceptual ambiguity of narco-terrorism, with the ambition to provide more nuanced perspective of the concept with regard to the academic and policy spheres, I provide a theoretical framework, which draws upon the crime-terror continuum model introduced by Tamara Makarenko.[236] Her model perceives organised crime and terrorist organisations as extreme points on a crime-terror continuum, where most illicit enterprises can be represented depending on their inclination towards one of the extremes and the nature of their operational environment. Makarenko identifies four different categories of relationships between the two types of organisations, specifically: alliances, operational motivations, convergence and the 'black hole'.[237] This model takes into account possible changes in motivation that governs the group action, which results in fluid rather than fixed position of

[233] Asa Hutchinson, "International Drug Trafficking and Terrorism," (testimony given before the Senate Judiciary Committee Subcommittee on Technology, Terrorism and Government Information, Department of State, Washington DC, 13 May 2002), https://2001-2009.state.gov/p/inl/rls/rm/9239.htm.
[234] Leonard Weinberg, Ami Pedahzur and Sivan Hirsch-Hoeffler, "The Challenges of Conceptualizing Terrorism," *Terrorism and Political Violence* 16, no. 4 (Winter 2004): 779.
[235] Chris Dishman, "The Leaderless Nexus: When Crime and Terror Converge," *Studies in Conflict and Terrorism* 28, no. 3 (2005).
[236] Tamara Makarenko, "The Crime-Terror Continuum: Tracing the Interplay between Transnational Organised Crime and Terrorism," *Global Crime* 6, no. 1 (Februrary 2004).
[237] Ibid, 131.

each organization on the continuum.[238] Moves along the continuum can be stimulated by internal changes within the organisation or by changing operational environment.

Makarenko claims that drug trade represents the most common criminal activity for terrorist organisations.[239] If the crime segment of the continuum would be perceived as solely illicit drug trade, the crime-terror continuum itself can be used as a tool to clarify the concept of narcoterrorism. Despite the fact that such a simplification fails to account for certain occurences, it provides better understanding and more practical depiction of interaction between crime and terrorism and as such it contributes as a theoretical complement to the definition of narcoterrorism.

The above mentioned observations lead to a conclusion relevant for this dissertation, specifically, that narcoterrorism might be perceived as a business tactic, one in the variety of methods in illicit entrepreneur's tool box, which can be deployed when necessary. The following pages will demonstrate that drug trafficking enterprises do not exercise brutal violence for ideological reasons, but their deliberations are practical, logical and economically rationalized.

Soon after his election as Mexican President Felipe Calderón launched Operation Michoacán at the end of 2006 in an explicit effort to further militarize the state anti-narcotics efforts. Since then much of Mexico has become a war zone where government violently clashes with cartel over control and this development has attracted increased attention from scholars, journalists as well as general public. Newspapers in the U.S., Mexico and around the globe started to produce regular coverage of the drug war developments providing vivid descriptions of horrific personal stories, murders and brutal executions as well as impacts on Mexican economy or the deteriorating rule of law across the country. Moreover, the mainstream culture embraced the topic and in the recent years many TV shows and movies have been produced depicting lives of famous narcos. Due to regular widespread media coverage, many spectators became household experts and armchair strategists on illicit drug trafficking. Yet, more attention paid to the phenomenon does not necessarily translate into deeper insights since entertainment is not equivalent to analysis-based understanding and in consequence few can still make sense of what is happening in Mexico.

What is the nature of the Mexican drug war? With its focus on cartel-state conflict, the "criminal insurgency" approach might prove helpful in providing explanation, but its perspective on insurgency as an effort to weaken the state elides substantial differences in goals of rebels and cartels. While rebellion engages a state to seize mutually valued territory and resourses, cartels fight the state aiming to constrain the state's behavior and to influence its policies. In consequence, ultimate victory in the struggle plays vital role in most cases of civil war, but is rather undesirable in wars of constraint. "Criminal war" theory must then explain how sustained coercive violence can be a preferred alternative to pacific strategies. Benjamin Lessing identifies two coercive logics of cartel–state conflict: violent lobbying and violent corruption.[240] Since the lobbying alternative offers more universalistic benefits, turf war among

[238] Tamara Makarenko, "A Model of Terrorist-criminal Relationships," *Jane's Intelligence Review* 15, no. 8 (September 2003): 4.
[239] Makarenko, "The Crime-Terror Continuum," 134.
[240] Benjamin Lessing, "The Logic of Violence in Drug Wars: Cartel-State Conflict in Mexico, Brazil and Colombia," (PhD. Diss., University of California, Berkeley, 2012).

cartels should make its occurence rarer than that of violent corruption. Both qualitative and quantitative evidence from Mexico and Colombia supports this prediction.

Since 2006, drug-related violence has claimed some 150,000 lives in Mexico and roughly 34,000 people went missing.[241] Such a heavy body count significantly surpasses the standard of 1,000 battle casualties per year in common definition of a civil war. Indeed, in the scholarly analysis of warfare "criminal" might well be the new "civil". Furthermore, direct comparison with civil war data, see the figure below, demonstrates that the drug war in Mexico is, by many standards, the most violent sub-national conflict of the 21st century. Still, from the historical perspective, Mexican drug war represents only the most recent chapter in the phenomenon of inter-cartel and cartel-state conflict in Latin America, alongside the Colombian drug war period between 1984–1993. Militarized drug wars have heavily afflicted three largest countries in Latin America, arguably replacing revolutionary insurgency as the prevalent form of conflict in the hemisphere.

Public figures as well as scholars have described Mexico's conflict as a civil war, sometimes as an epithet, but mostly to convey the gravity of the situation.[242] To some extent the classification of drug-related conflicts as civil wars represents a potential barrier to understanding the phenomenon. From the political perspective civil war is usually represented by high degree of instability and loss of state control[243] with potential consequences for international intervention.[244] From the analytical perspective, there is a popular narrative in current conflict studies which promotes greed as one of the key motives for rebels, sometimes it even perceives insurgency as organized crime.[245] Nevertheless, the fundamental question in the effort to understand the drug war, neither the intensity nor the particular motives driving the parties involved, primary focus should be on its dynamics as these resemble or differ from other kinds of wars. Tangible conceptualization of criminal war should stem from observable characteristics that underline differences in prevalent logics of violence. Disregarding fundamental differences can result in state policies which are not only ineffective, but potentially counterproductive.

The fundamental difference between drug wars and revolutionary insurgencies is that drug trafficking organizations do not aim to overthrow the government and seize power themselves. Without viable conceptual alternative, the prevailing tendency has been to perceive Mexican drug war as a criminal subtype of insurgency.[246] The benefir of this approach consists in its focus on the traffickers' willingness to directly confront state power with lethal force, a characteristic which separates Mexican, and previously Colombian, traffickers from the other organized crime groups on the continent. Unlike trafficking in illicit narcotics and corruption

[241] U.S. Library of Congress, Congressional Research Service, *Mexico: Organized Crime and Drug Trafficking Organizations*, by June S. Beittel, R41576 (2018), https://fas.org/sgp/crs/row/R41576.pdf.
[242] Andreas Schedler, *The Politics of Uncertainty: Sustaining and Subverting Electoral Authoritarianism* (Oxford: Oxford University Press, 2013).
[243] Stathis N. Kalyvas, "How Civil Wars Help Explain Organized Crime - and How They Do Not," *Journal of Conflict Resolution* 59, no. 8 (2015).
[244] Ioan Grillo, *El Narco: Inside Mexico's Criminal Insurgency* (New York: Bloomsbury Press, 2011), 202–6.
[245] Paul Collier and Anke Hoeffler, "Greed and Grievance in Civil War," *Oxford Economic Papers* 56 (2004).
[246] Robert J. Bunker, *Narcos Over the Border: Gangs, Cartel and Mercenaries* (New York: Routledge, 2010); Grillo, *El Narco*; John P. Sullivan and Adam Elkus, "State of Siege: Mexico's Criminal Insurgency," *Small Wars Journal*, 2008. https://smallwarsjournal.com/blog/journal/docs-temp/84-sullivan.pdf.

of state authorities, which occur commonly in many places, conflict between cartels and state power is far more unique.

Despite its initially promising outlook, the "criminal insurgency" approach ultimately overreaches in its ambition, when the concept of insurgency is stretched to include revolution and secession as well as intimidation and degradation of state forces.[247] In consequence, insurgency as "competitive state-building"[248] is replaced with much broader notion of "state-weakening." Omitting substantial differences between the aims of rebels and drug traffickers results in failure to clarify the fundamental question, which is why to challenge the state by force if there is no ambition to overthrow it or to secede from it. The seemingly obvious answer, which is to prevent government intervention into their activities, does not qualify because many criminals and organized crime groups would like to secure that outcome, but very few of them resort to violence against the state power to achieve it. A notable exception was the Sicilian mafia's brutal assassination of Giovanni Falcone and Paolo Borsellino in the early 1990s.

Once there are reasonable prospects for victory, insurgencies decide to fight the state to overthrow it and to establish their own régime. Similarly, drug trafficking enterprises engage their competition in order to achieve tangible results, extending market share or expanding their territory. Insurgencies and turf wars follow the same guiding logic of tangible outcomes, mostly in a form of conquest. The theory claims that in the context of weak institutions, actors will engage in violence to establish physical control over mutually valued territory or resources when satisfactory outcomes cannot be secured by bargaining.[249] Moreover, conquest can be decisive, resulting outcomes could be definite and difficult to reverse.

Less obvious are tangible results, which might be achieved by violently challenging the state, since open contest usually generates more state repression. Furthermore, cartels do not seek to topple the regime so there is virtually no chance of decisive victory, at least in a form that would justify the costs of the conflict. For this particular reason, criminals and illicit entrepreneurs globally prefer to avoid direct confrontation with authorities, choosing anonymity, low profile and corruption as concealment techniques to prevent exposure to law enforcement.

Arguably, when illicit traffickers choose to openly fight the state, their strategic goal is not to overthrow the state, but to constrain it, to change its behavior, which effectively means to change its policies. The function of violence in these wars of constraint is coercive, that is to make people, or the government, to avoid certain behavior.[250] War of conquest, on the other hand, is usually synonymous with deployment of brute force aimed to seize property or territory. Occasionally, insurgency may resort to coercion, but only within the context of its larger objective, which is ultimately conquest. Potentially, insurgents might be willing to accept compromise, but this outcome is likely temporary at best, since the desired prospect of final conquest undermines any negotiations short of victory.[251] In contrast, parties to wars of

[247] Sullivan and Elkus, "State of Siege", 6–7.
[248] Stathis N. Kalyvas, *The Logic of Violence in Civil War* (Cambridge: Cambridge University Press, 2006), 218.
[249] James D. Fearon, "Rationalist Explanations for War," *International Organization* 49, no. 3 (Summer, 1995); R. Harrison Wagner, "Peace, War, and the Balance of Power," *American Political Science Review* 88, no. 3 (1994).
[250] Thomas C. Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966), 240.
[251] Robert Powell, "Persistent Fighting and Shifting Power," *American Journal of Political Science* 56, no. 3 (2012).

constraint do not aim for decisive defeat of the opposing side and they use brute force more tactically, in service of their larger objective, which is essentially coercive.

Lessing further develops this conquest versus constraint distinction into a broader typology of conflict, in which he provides new perspective on some of the issues neglected in Blattman and Miguel's debate on "greed versus grievance"[252] and Kalyvas's "old versus new wars" theory.[253] While distinguishing psychological motivation from ideological beliefs represents a conceptual as much as empirical challenge, distinction between conquest and constraint is clearer, although not always directly observable. Furthermore, deeper strategic differences become visible when focus is placed on the structure of the contested rents. The objective in the wars of constraint is not physical appropriation, because neither of the beligerents desires what the opponent holds. Therefore, decisive victories become less likely or even undesirable as the logic of coercive bargaining prevails.

Addressing this challenge, Lessing delineates two main logics of antistate violence driving cartel–state conflict. The first is violent lobbying, when drug trafficking organizations target political leaders aiming to change existing *de jure* policies. Such was the case of Pablo Escobar's total war on the Colombian government between 1984 and 1991. The second is violent corruption, when drug traffickers target law enforcement agencies and officers aiming to intimidate them and lower the price of bribes. The best manifestation of this type of logic was Pablo Escobar's strategy of *plata o plomo* mentioned earlier. In addition to these two categories, Lessing distinguishes other logics of violence, which arise from turf wars between drug traffickers. One is a logic known in Mexico as *calentando la plaza*, when a cartel attacks rival territory in order to attract law enforcement. The other logic consists of competitive and internal signaling.[254]

Lessing further deduces critical variables and conditions favoring the adoption of distinct violent strategies, as well as specific patterns of violence that are likely to emerge under each logic. In lobbying there is increased chance for free riding, therefore violent lobbying is more common or more likely to occur where cartels cooperate. Similarly, as corruption is more particularistic, inter-cartel turf wars should favor the logic of violent corruption. Qualitative evidence seems to support the general principles of this theory. In Mexico, where turf wars predate cartel–state conflict, violent lobbying is rather unique phenomenon. Whereas in Colombia, cartels were at relative peace in the early period and had established mechanisms for collective action, which made violent lobbying a salient feature at the early stages. Quantitatively, data focused on cartel-related violence in Colombia and Mexico seem to be supporting the notion, since occurrence of terror tactics associated with violent lobbying was more frequent in Colombia than Mexico. It is appropriate to mention here that turf-war dynamics alone are unlikely to produce cartel–state violence, but could be perceived as complementary to violent corruption.

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[252] Christopher Blattman and Edward Miguel, "Civil War," *Journal of Economic Literature* 48, no. 1 (March 2010): 18.
[253] Stathis N. Kalyvas, "'New' and 'Old' Civil Wars: A Valid Distinction?", *World Politics* 54, no. 1 (2001).
[254] Peter H. Reuter, "Systemic Violence In Drug Markets," *Crime, Law and Social Change* 52, no. 3 (September 2009).

Conceptualizing the Conflict Between PSINs and the State

Conceptually, drug wars are often perceived as representing the extreme of a continuum between ideological and commercial or criminal struggles. Despite the fact such a distinction has its merit, for example the fight of the Zapatistas is Mexico is more political than the conflict of Los Zetas, its usefulness is limited. First, there is a heavy normative valence since ideological motives are widely perceived as morally superior to purely economic ones, which results in conceptual contestation.[255] Analytically, the debate is similar to that of greed vs. grievance[256], and practically, the contest is in the fighting and negotiating between armed groups and states over the political status.

Moreover, there is a substantial difference in rent-producing characteristics between various categories of criminal activities.[257] On one hand, states directly compete with criminal groups over rents from natural resource as well as the right to extort populations through taxation. On the other hand, state authority may attempt to minimize illicit drug trafficking profits but it cannot capture them. Furthermore, criminal activities such as extortion or kidnapping require coercive expropriation, which generates a constituency of potential victims willing to spend resources on prevention. In contrast, the essential characteristic of illicit drug trade is voluntary exchange, which generates a constituency of paying consumers. This demand for illicit trafficking underlines a critical fact of the trade: supression or elimination of one PSIN generally favours its competition. This fact is what distinguishes drug trade from other illicit activities, since the same is unlikely to be valid for kidnapping rings, extortionists, or most insurgencies.

In summary, the political vs. criminal distinction alone does not provide strong guidance to cartels' strategic concerns. This is particularly valid for a conflict between cartel and state. Metz helpfully focuses on increasing willingness among non-ideological groups to challenge states[258] while also exploring key differences in motivations of such groups.[259] But the ongoing expansion of insurgency-related adjectives, including "commercial insurgency," "post-Cold War insurgency"[260], "criminal insurgency"[261] or "the new urban insurgency"[262], has served primarily to expand the concept of insurgency to include organized antistate violence in general, and potentially any state-weakening action, irrespective of its strategic objectives or prevalent logic. Furthermore, the conceptual overstretching[263] is equally valid to related terms such as territory, space, or even the state, as scholars seek to rationalize and incorporate new phenomena such as gangs, cartels, or terrorists in terms of familiar, older ones.

Instead of rethinking insurgency to the point where it no longer implies a struggle to overthrow a government or secede from a state, Lessing takes a different approach and treats

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[255] W. B. Gallie, "Essentially Contested Concepts," *New Series* 56 (1956).
[256] Blattman and Miguel, "Civil War", 18.
[257] Thomas C. Schelling, "Economics and Criminal Enterprise," *The Public Interest* 7 (1967).
[258] Steven Metz, *The Future of Insurgency* (Carlisle, PA: Strategic Studies Institute, US Army War College, 1993).
[259] Steven Metz, *Rethinking Insurgency* (Carlisle, PA: Strategic Studies Institute, US Army War College, 2007).
[260] Metz, *The Future of Insurgency*.
[261] Sullivan and Elkus, "State of Siege".
[262] Manwaring, *Street gangs.*
[263] Giovanni Sartori, "Concept Misformation in Comparative Politics," *The American Political Science Review* 64, no. 4 (1970).

'proximate aims of fighting' as a key variable in conflict definition. In this particular case is whether particular groups fight for formal political control or not. Lessing thus develops upon concepts discussed in civil war scholarship. Kalyvas identifies competitive state building as the central goal for insurgents and considers organized and sustained rebellion occuring in civil wars distinct from phenomena such as banditry or mafias.[264] Fearon and Laitin perceive civil wars as conflicts fought simply to change policy.[265] Reality might be different, since the aim of the rebel side in most civil wars is to overthrow the central government or to take political control of a territory. Rebel groups rarely declare that their main objective is to induce the government to change its policy on certain issue, and once that is accomplished the will disarm, disband and leave politics.[266]

Interstingly enough, on some occasions cartels have announced precisely this when attacking states or when attacking civilians to exert pressure on state leaders. An example of such communique came from Pablo Escobar regarding his campaign of bombings, top-level assassinations and systematic extermination of police officers and kidnappings in the 1980s when fighting the extradition treaty. In 1986, he publicly promised to lay down arms once extradition is suspended. Another example was the greeting from Mexico's Knights Templar to the incoming President Enrique Peña Nieto with narco-banners reading: "If you honor your promise [to alter the course of the drug war], we will lay down our arms … otherwise we will continue to defend our territory".[267]

In more general terms, in classic insurgency the proximate aim of fighting is conquest, in which contestants seek to expropriate from or replace their competition. Combating nation states implies competitive state building, even when only a portion of the national territory is contested. By contrast, Cartel-state represents a war of constraint, where belligerents seek to coerce opponents into changing their behavior or policies. This distinction is intended to characterize, not to define: insurgents could engage in wars of constraint but they rarely do just as illicit drug cartels could aim to seize formal state power, but they have not yet done so. Lessing claims that distinguishing between conflicts based on how they are fought can help us theorize about why.

On a strategic level, conquest versus constraint represents an extension to the distinction that Schelling[268] defined at the tactical level between brute force and coercion. He argued that there is a difference between taking what you want and making someone give it to you. Similarly, there is a difference between holding what people are trying to take and making them afraid to take it. It is the basic difference between defense and deterrence.[269]

Contemplating interstate war, Schelling notes that both tactics may be deployed and what is coercive at some level of analysis may be part of a larger brute force campaign.[270] Such

[264] Kalyvas, *The Logic of Violence*, 218.
[265] James D. Fearon and David D. Laitin, "Ethnicity, Insurgency, and Civil War," *American Political Science Review* 97, no. 1 (2003): 76.
[266] James D. Fearon and David D. Laitin, "Civil War Termination," (paper presented at Annual Meetings of the American Political Science Association, Chicago, Illinois, August 30 – September 1, 2007), 1–2.
[267] Edward Fox, "Knights Templar Welcome Mexico's New President," *InSight Crime*, December 20, 2012, https://www.insightcrime.org/news/brief/knights-templar-welcome-mexicos-new-president/.
[268] Schelling, *Arms and Influence*.
[269] Ibid., 240–41.
[270] Ibid., 244.

is the case of civil war, where rebels may deploy coercive tactics in pursuit of conquest and may occasionally be satisfied with a coerced change in government policy short of outright victory. Yet their ultimate goal – taking what they want – remains.

In comparison, cartels cannot simply take what they want from the state, because ultimately what they want is not something in the state's possession, but rather something they would like to prevent the state from doing. Even in areas and territories where cartels wield substantial control, they do not aim for a complete removal of a state presence; their main interest remains constriction of state repression directed against their illicit economic activities. Tactically, cartels can sometimes deploy brute force defensively in order to maintain possession of guns, drugs, and money that enforcers intend to seize. Still, deterrence is more effective than successful defense; better than defending what the law enforcement authority attempts to seize would be making the police afraid to take it.

Similarly, nation states can neither effectively conquer illicit rents, which the cartels obtain from trafficking, nor can authorities realistically secure preferred outcomes by force. Nonetheless, states do seek not only constraint, but destruction of cartels. Here, it is important to distinguish between states' tactical goals of dismantling a cartel from larger strategic objectives in fighting drug wars. Simple rhetoric is a complicated guide to identifying those aims since international drug prohibition treaties keep setting total eradication as presumably plausible objective, and authorities frequently label dismantling cartels as victory.[271] Yet, empirically there are virtually no examples of sustained eradication of viable drug trade. Skaperdas holds that "the struggle to control organized crime is a never-ending process, not a battle or a war that can be completed within the foreseeable future."[272] In other words, any reasonable state authority must recognize its drugwar aims to be constraint instead of total elimination of illicit drug markets.

Relative observability is among advantages of the "conquest versus constraint" distinction. Naturally, battle objectives may represent undeclared motives that must ultimately be included in order to operationalize the distinction. Yet it is certainly easier to correctly asses whether an armed group is seeking to replace the state authority or whether its guiding motivation is greed. Among the few points analysts agree on is that drug cartels generally lack revolutionary ambitions. In comparison, the greed versus grievance approach has been marked by observational equivalence of the two types of motivations.[273]

Another observable advantage is that the "conquest versus constraint" distinction indicates distinct underlying logics of violence. This holds even if rebels seek to defeat state power only to influence policy and could be potentially opened to government concessions were it not for commitment problems.[274] In these cases, there are low prospects for negotiated settlements because rebels assume that the state authorities will not honor their promises once they disarm. Therefore, only by seizure of state power can rebels secure their preferred outcomes and policies. Generally, when actors face potentially negative shifts in relative power during peacetime they may prefer destructive fighting because it secures desirable distribution

[271] Robert C. Bonner, "The New Cocaine Cowboys: How to Defeat Mexico's Drug Cartels," *Foreign Affairs* 89, no. 4 (2010).
[272] Skaperdas, "The Political Economy of Organized Crime", 174.
[273] Blattman and Miguel, "Civil War," 18.
[274] Fearon and Laitin, "Civil War Termination".

of benefits while they are relatively strong.[275] In lottery models, securing of outcomes occurs via a decisive battle since conquest prevents future shifts in the balance of power by eliminating competition. In process models, fighting produces permanent results when it is decisive or when it diminishes loss of relative power should the rebels surrender their arms.[276] Therefore, demanding conflict can be preferred alternative to settlement even when there is virtually certain prospect for a permanent stalemate.[277]

Such approach, however, is not suitable for cartel–state conflict. Within that context, decisive victory is likely unrealistic and therefore not a meaningful solution to commitment problems. Even decisive military victory over the state authority would not secure desirable policy or distribution of rents for cartels. In the existing international system, an explicit narco-state holding a monopoly on cross-border smuggling is virtually unthinkable. In contrast, aspiring insurgencies can reasonably hope for military victory as well as for international legitimacy.[278] From the nation state perspective destruction of existing cartels simply offers market share to competition, dynamic which is highly inlikely for insurgencies.

Secondly, in cartel–state conflict negative shifts in power during peacetime may be significantly smaller or there might none at all. While civil war models assume that rebels disarm whenever they cease to fight, there is an expectation for cartels to maintain their capacity for violence even in peacetime due to their illicit business model. Therefore, cartels could promise not to disarm in response to policy concessions and states could promise to honor those concessions. Another reason why cartels are less susceptible to hostile shifts in power during peacetime is that they can corrupt state enforcers without direct fighting. In summary, in cartel–state conflict the strategic dynamic which drives commitment problems as well as the mechanism by which fighting resolves them may be less relevant.

On the other hand, actual negotiation might prove significantly more difficult and often frustrating. While negotiating with rebels might be politically challenging, nation states face a virtual taboo when it comes to open negotiations with drug cartels and other criminal organizations. Furthermore, there is no clear concept how such an agreement would look like. Possibly, cartels could promise to end their trafficking business in exchange for amnesty just as Escobar did in 1980s Colombia. Although, considering the financial profitability of trafficking such promises are hardly credible. Even if state authorities could financially motivate opposing cartels, new cartels could later fill the unmet demand on the market and then seek to their own deal with the government. In consequence, the most realistic form of a deal would likely involve secretly offering cartels greater freedom to continue profiting from their criminal activities that states are committed to fight by international treaty, while demanding non-violence from the cartels in return. On the rare occasions these politically extremely sensitive policies have been attempted, they proved relatively effective but difficult to sustain.

[275] Robert Powell, "Bargaining and Learning While Fighting," *American Journal of Political Science* 48, no. 2 (2004): 344–361.
[276] Powell, "Persistent Fighting".
[277] James D. Fearon, "Why Do Some Civil Wars Last So Much Longer than Others?" *Journal of Peace Research* 41, no. 3 (2004).
[278] Fearon and Laitin, "Civil War Termination", 16.

For instance, the Calderón's administration in Mexico publicly ruled them out on various occasions.[279]

Therefore, theories of cartel–state conflict must clarify how sustained combat can represent an optimal response for cartels when neither decisive victory nor a sustainable deal are viable options, and where forestalling adverse shifts in power is not a substantial factor. The resulting suggestion is to focus on how antistate violence could maximize an ongoing flow of profits from illegal activities, with particular attention paid to the coercive use of violence to punish opponents, rather than seeking protection from them.

			Proximate Aim of Fighting	
			'Conquest' (Expropriate / Replace Opponent)	'Constraint' (Change Opponent's Behavior)
Belligerent Dyads	Sub-National	State(s) vs. Domestic Non-State Actor (NSA)	Revolutionary Insurgency	Cartel-State Conflict
		Domestic NSA vs. Domestic NSA	Inter-Cartel Turf War	Coercive Politics
	Inter-National	State(s) vs. Foreign NSA	Foreign Intervention	International Terrorism
		State(s) vs. State(s)	Interstate War	Coercive Diplomacy

Figure 3: Proximate Aims of Fighting by Benjamin Lessing (Benjamin Lessing, "Logics of Violence in Criminal War," *Journal of Conflict Resolution* 59, no. 8 (2015): 1495.

In the figure above Lessing extends the distinction between conquest and constraint to a broader set of conflict and belligerent types. The contents of individual cells provide only examples, not exhaustive descriptors. Moreover, real-world historic examples may cross cell borders or even shift between them over time. For instance, in the Opium Wars, Britain both annexed parts of Chinese territory (conquest) and imposed significant policy concessions (constraint). Coups inspired, organized or led from abroad may confuse the line between pure conquest and the intention to constrain specific actions of neighbor. Similarly, conflicts may also evolve over time and what began as revolutionary insurgency, with both sides truly fighting for control of the state, can degrade into a criminal war with rebels hiding in the jungle while subsisting on drug profits for decades with no clear ambition to capture the center or secede from the state.

The top rows of Lessing's chart are of principal interest because they distinguish cartel–state conflict from revolutionary insurgency as well as from inter-cartel turf war. Especially the latter distinction is of vital importance because cartel–state conflict and turf war are seemingly interrelated, yet they have each occurred in the absence of the other indicating differing logics and motivations. For instance, in Colombia cartels were peacefully allied when cartel–state

[279] Alejandro Poiré Romero, "El quinto mito: El Gobierno Federal favorece a Joaquín ´El Chapo´ Guzmán y al grupo criminal del Pacífico," *Blog de la Presidencia*, July 4, 2011, http://calderon.presidencia.gob.mx/el-blog/el-quinto-mito-el-gobierno-federal-favorece-a-joaquin-el-chapo-guzman-y-al-grupo-criminal-del-pacifico.

conflict emerged. Moreover, there is a differing empirical pattern. Turf wars tend to occur in all segments of the illicit-narcotics supply chain, anywhere from plantations to retail markets, and they involve small street-level gangs as much as transnational corporations. Turf wars also vary in intensity and duration. In comparison, cartel–state conflict is far more unique since most illicit traffickers in most countries tend to avoid direct confrontation with the state, but in Colombia and Mexico it has been a prolonged conflict once it broke out. Lessing's typology offers an explanatory hypothesis that cartel–state conflict erupts only when traffickers view sustained armed confrontation as optimal, so existing cases will likely involve only large and well-equipped illicit trafficking enterprises.

In broader terms, this typology clarifies relationship between the nature of the contested profits and the dynamics of conflict, which is a connection often obscured by a simplistic perception of political versus criminal. Wars of conquest, motivated by either greed or grievance, tend to be fought over rivalrous goods that are similarly valued by both sides. It is a zero-sum game for both sides and considering that war destroys many of that mutually valued goods, in theory there are possible distributions of prize both sides would prefer as alternative to war. However, in wars of constraint neither side pursues exactly what the other possesses, therefore one side's loss does not equal the other side's gain. For instance, a diamond mine expropriated by rebel forces is a diamond mine lost to the state. In contrast, an extra dollar in cartel profits does not equal a loss of a dollar for the state. The critical difference is that narcotics prohibition generates nearly limitless source of profits that criminal entities can compete over, but which nation states have no direct access to. Considering the gigantic proportions of the world illicit drug trade compared to other criminal activity, the focus on the structure of criminal rents is a prospective avenue for future research.

Logics of Violence: Lobbying versus Corruption

In the following pages a theory of cartel–state conflict as a war of constraint will be explained and defended. In both of the principal logics discussed here, violence is perceived as coercive and fighting is not motivated by the prospect of winning a decisive control over territory or power. The theory itself is not a logical consequence of the distinction between conquest v. constraint, rather it derives from a larger empirical study of the Mexican and especially the Colombian cases, which provide the main examples for the principal logics discussed subsequently.

Classification of cartel–state conflict as a war of constraint carries an implicit hypothesis that cartels fight governments and states to influence policy. While supporting evidence exists from various examples in Colombia, including Escobar's war against extradition treaty, in Mexico public demands by cartels for changes in de jure policy have been rare. Although, within this context Scott made an argument that corruption, perceived as bribery in exchange for nonenforcement, should also be considered as a mode of influence, with policy outcomes as the ultimate interest.[280] This is particularly valid for criminal enterprises, who may often find it easier to weaken the law enforcement through bribery than to alter the laws themselves.

Developing on Scott's insights, Lessing labels attempts to influence the formulation of de jure policy as lobbying, an effort usually aimed at leaders such as key executives, legislators,

[280] James C. Scott, "Corruption, Machine Politics, and Political Change," *American Political Science Review* 63, no. 4 (1969).

and top tier commanders. At the same time, efforts to influence enforcement, or de facto policy, he labels as corruption, which is normally directed at enforcers such as police, soldiers and investigators. The distinction outlined is not absolute since some officials have influence over both de jure and de facto policy and therefore they might be pressured to change both, as with judges represent enforcement when handing down individual sentences that simultaneously set policy precedents. Here, Scott's argument that benefits of corruption are particularistic while those of lobbying are more universal can help to make distinction between a corruption effort directed at reducing one's own sentence and a lobbying effort to deliver a favorable precedent.[281]

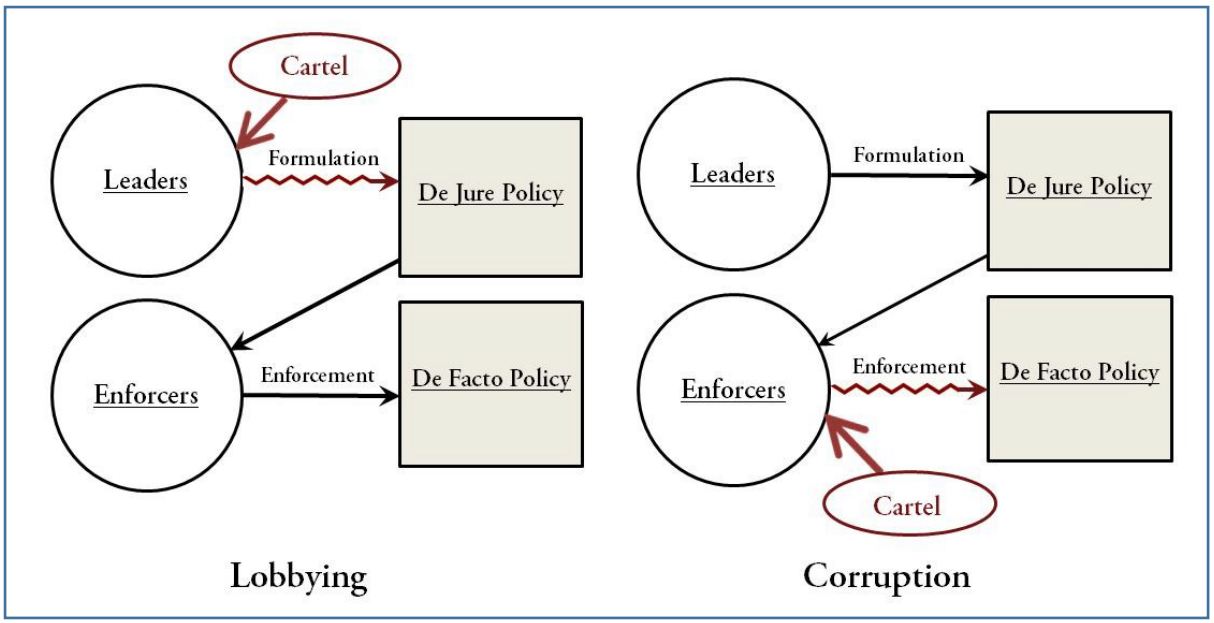

Figure 4: Levels of Policy Influence by Benjamin Lessing (Benjamin Lessing, "The Logic of Violence in Criminal War: Cartel-State Conflict in Mexico, Brazil and Colombia," (PhD. Diss., University of California, Berkeley, 2012), 30.)

Legitimate interest groups may deploy ruthless tactics while lobbying or corrupting, but they hardly resort to violence.[282] In comparison, cartels already cope with certain levels of repression, which provides them with incentives to hide, maintain a low profile and minimize confrontation. At the same time, it can make violence perspective as a means to influence if it results in little additional state repression. Strategically, the choice between hiding and fighting is demanding, since these two alternatives undermine each another. While fighting increases leverage over state actors, its cost is the low profile that hiding affords, and vice versa.

Combination of these individual dimensions produces four differing strategies. Among these, hiding strategies represent conventional corruption and lobbying. Violent corruption occurs when cartels deploy violence to influence enforcement. Normally, this means for enforcers to receive bribes, but there are more options available including pure intimidation, pressuring enforcers to inflict repression on rivals, or directly eliminating honest individual

[281] Scott,"Corruption".
[282] Ernesto Dal Bó, Pedro Dal Bó, and Raphael Di Tella, ""Plata o Plomo?": Bribe and Punishment in a Theory of Political Influence,"*American Political Science Review* 100, no. 1 (Februrary 2006).

enforcers unwilling to comply. Violent lobbying is represented by cartels deploying violence to pressure leaders to implement de jure policy changes.

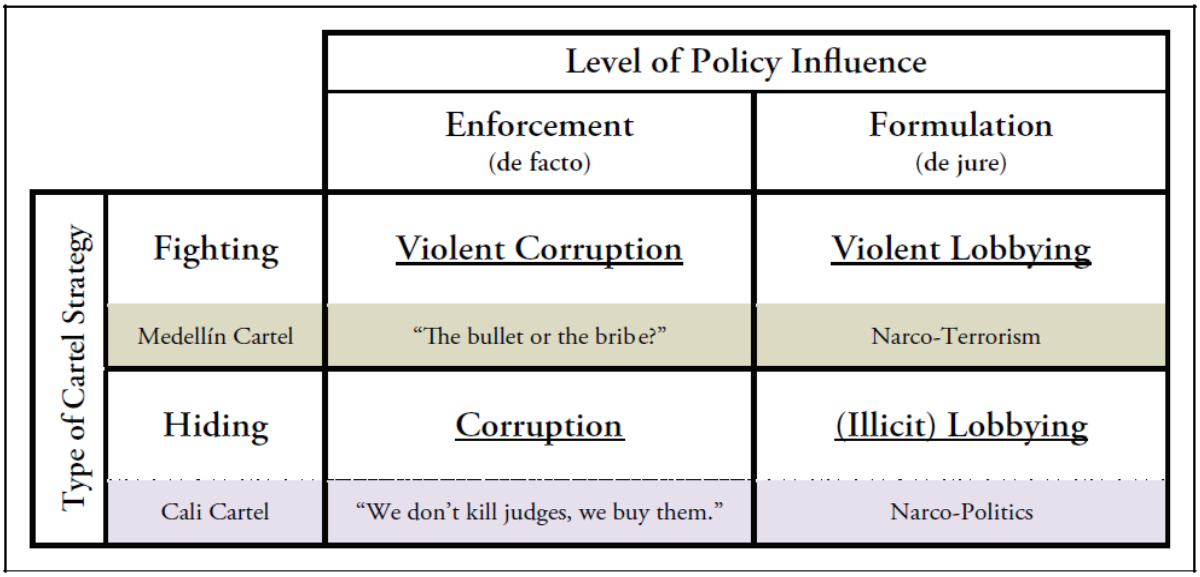

Figure 5: Strategies of Influence Over Policy Outcomes by Benjamin Lessing (Benjamin Lessing, "Logics of Violence in Criminal War," *Journal of Conflict Resolution* 59, no. 8 (2015): 1498.)

The two main cartels of Colombia's narco-violence period of 1984–1993 exemplified these strategies. Pablo Escobar's Medellín cartel was a prime example of the fighting approach at both levels. His notorious offers of *plata o plomo* to politicians, judges, military and police officers, threats regularly backed up by hundreds of usually brutal assassinations, truly captured the essence of violent corruption. Similarly, his widespread campaigns of terrorist violence consisting of bombings, high-profile assassinations and kidnappings, multiplied by public demands to abolish extradition, was perhaps the most notorious example of violent lobbying witnessed to date.

In contrast to Medellín, the Cali cartel deliberately minimalized the use of violence, avoided public attention and focused on developing a respectable profile. Cali cartel's leader Gilberto Rodríguez Orejuela famously rejected Escobar's notion of violent corruption and described his own hiding strategy: "We don't kill judges (…) we buy them".[283] Naturally, Escobar bribed judges as well; only he discovered that violent death threats made the bribery process less difficult. At the de jure level, the Cali cartel did not join Escobar's total war, it actually ended up collaborating with state authority to bring him down in 1993.[284] Subsequently, it offered enormous campaign donations to leading presidential candidates in exchange for a negotiated amnesty.[285] Ernesto Samper agreed to make a deal and honoured his promise after he won the presidency. Ultimately, information about cartel donations leaked and

[283] Rensselaer W. Lee III, "Global Reach: The Threat of International Drug Trafficking," *Current History* 94, no. 592 (May 1995): 205.
[284] Natalia Morales and Santiago La Rotta, *Los Pepes: Desde Pablo Escobar hasta Don Berna, Macaco y Don Mario* (Bogotá: Planeta, 2009).
[285] Ronald Chepesiuk, *The Bullet or the Bribe: Taking Down Colombia's Cali Drug Cartel* (Westport: Praeger Publishers, 2003), 190.

subsequent scandal forced Samper to seek capture of the Cali cartel leaders and to dismantle their business operation.[286]

Various Factors Favoring Violent Corruption and Lobbying

Violent corruption and violent lobbying are not mutually exclusive as demonstrated in the case of the Medellín cartel. Still, there is a variety in conditions under which it is reasonable to deploy these strategies. The minimum requirement for success in violent corruption is some level of police corruption and the capacity to make credible threats of violence to law enforcers. At the same time, cartels have alternative option of nonviolent corruption, which is to offer bribes and opt for hiding should law enforcers refuse them. Under equal conditions, offer of bribe with accompanying threats of violence should result in lower bribes in equilibrium[287]; cartels must therefore consider this additional leverage against any potential increase in repression that antistate violence might bring upon them. The relative advantage of *plata o plomo* style of threats is therefore dependant on the prevalence of corruption and the overall levels of repression as well as the degree to which state repression is conditional on the use of violence by cartels. Lessing develops a formal model to rigorously explore this trade-off.[288]

Lessing's Model

The game discussed here has two players: an illicit drug trafficking organization *D*, and a street-level police officer *P*. It is practicable to perceive a government leader *G* as a third player who defines some of the parameter values prior to the interaction modeled here. Rather than explicitly modeling *G* as a strategic actor, Lessing treats the policy parameters under G's control as exogenously defined, then takes comparative statics to demonstrate how policy changes could shift the equilibrium strategies of the players. *D* chooses first, deciding on a level of armament a to spend on weapons and enforcers; these are retrospective costs, so that $-a$ appears in *D*'s payoffs regardless of what branch the game follows. Subsequently, the illicit profits y from *D*'s activities are recognized, where $y \sim [\, y, \bar{y}\,]$ is a random variable; *D* observes y, *P* does not. Realizing that *D* chooses a before learning y, there is absence of signaling. Then *P* requests a bribe b. *D* then contemplates three courses of actions: pay the bribe (*B*), hide (*H*) or fight (*F*). *D*'s strategy is a selection of a and a mapping from recognized values of y and *P*'s selection of b to actions: $\sigma^D : \{a;A: \{y, b\} \rightarrow \Delta \{ B,H, F \}\}$. *P*'s strategy is a mapping from a and parameter values to bribe demands: $\sigma^P : \{b(a, \cdot):\{ a, \cdot\} \rightarrow b\}$. The solution concept is subgame perfect equilibrium.

- **Payoffs**

If *D* decides to pay the bribe, he keeps all of the illicit profits y minus the bribe b and his retrospective costs a. *P* obtains the bribe b less the expected cost of corruption d (see below). There is an implicit assumption here that *P* can stop enforcing once he obtains b.

If *D* decides to fight or hide, *P* enforces, causing *D* to lose a part of realized drug rents. To achieve tractability, Lessing models this loss as a contest success function; some of the outcomes generalize to a broader class of functional forms. Whether hiding or fighting, *D*'s loss

[286] Rosso José Serrano Cadena, *Jaque mate: de cómo la policía le ganó la partida a "El Ajedrecista" ya los carteles del narcotráfico* (Bogotá: Grupo Editorial Norma, 1999).
[287] Dal Bó, Dal Bó and Di Tella, "Plata o Plomo?"
[288] Lessing, "The Logic of Violence in Drug Wars".

is dependant in part on the level of repression he faces. Let *s* represent the overall amount of repressive force at state's disposal, which can be perceived as a combination of manpower, technology, equipment and jurisdiction to enforce laws and engage cartels. Then $\{s_h, s_f\} \leq s$ is the level of repressive force aimed at *D* dependant on hiding or fighting respectively. Now, the concept of conditionality of repression can be formally defined: repressive policy is conditional to the extent that $s_f > s_h$. A key assumption here is that P cannot affect these variables, only to decide whether to enforce or not. More specifically, Lessing assumes that repression is exhausted when *D* fights, so $s_f = s$, and that $s_h = s(1 - c)$, where $c \in [0, 1]$ parameterizes conditionality of repression.

Now, if *D* chooses to fight, he keeps a portion of drug rents given by the function $\frac{a}{a+s}$. If *D* chooses to hide, then *a* does not come into play. Instead, *D* retains $\frac{\eta}{\eta+sb}$ of *y*, where η is a scaling parameter that describes the benefit of hiding relative to fighting. Substantively, η can be viewed as an inverse measure of the territoriality of the drug business: when η is low, territoriality is high, so that hiding forfeits a substantial portion of rents.

Lessing normalizes *P*'s payoff to enforcing when *D* decides to hide to *0*, and says that if *D* chooses to fight, *P* incurs disutility of $-\frac{a}{a+s}\emptyset$, where $\emptyset$ is a parameter value describing *P*'s relative reluctance for violence. The fact that, generally, $\emptyset \neq y$ reflects the notion that in cartel-state conflict the two sides are not combating for control over the same prize. In situations of regularized corruption the police officers are willing to assume the role of rent collectors, but they unwilling to physically administer the drug trade, and they would obtain nothing from appropriating *D*'s territory. The figure below represents the game scheme with these generally identified payoffs:

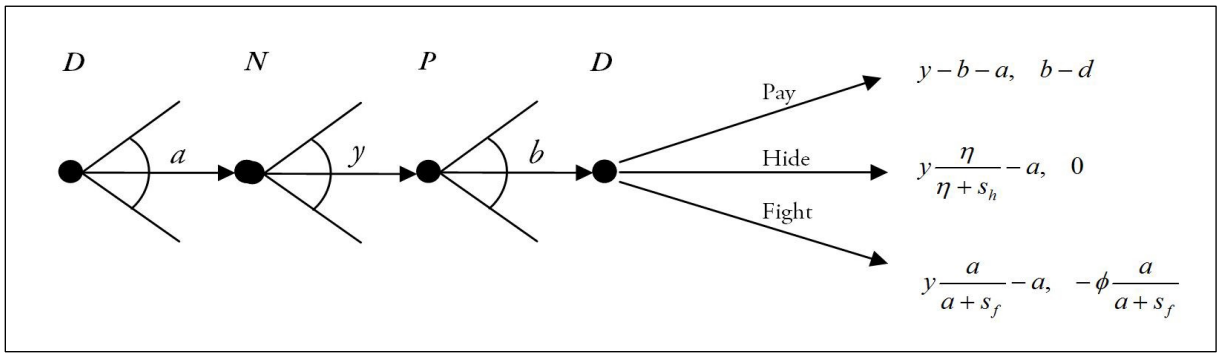

Figure 6: Bribe Negotiation Game Tree by Benjamin Lessing (Benjamin Lessing, "The Logic of Violence in Criminal War: Cartel-State Conflict in Mexico, Brazil and Colombia," (PhD. Diss., University of California, Berkeley, 2012), 43.)

1.$\frac{d}{da}\left(\frac{a}{a+s}\right) > 0$; $\frac{d}{da}\left(\frac{\eta}{\eta+sb}\right) = 0$: arming increases *D*'s and decreases *P*'s payoffs to fighting, but there is no effect on their payoff to hiding.

2.$\frac{d}{ds}\left(\frac{a}{a+s}\right) < 0$; $\frac{d}{ds}\left(\frac{\eta}{\eta+sb}\right) < 0$: the more state repressive capabilities deployed in response to an action, the smaller portion of *y* that *D* can retain.

3. $\frac{d}{db}\left(\frac{a}{a+s}\right) = 0$; $\frac{d}{db}\left(\frac{\eta}{\eta+sb}\right) = 0$. No bribe is paid, therefore the value of the bribe request *b* does not have any effect on either players' payoffs to *H* or *F*.

4. $\exists\ \tilde{a}(\cdot) > 0$: $\frac{\tilde{a}}{\tilde{a}+s} = \frac{\eta}{\eta+sb}$: Regardless of specific parameter values, there exists certain level of armament such that by fighting *D* wins a greater portion of *y* than by hiding. Fighting when *a = 0* gains a smaller portion of *y* than hiding.

- **Drug profits** (*y*)

The amount of realized profits from illicit drug trafficking represents a random variable *y*, and it is the uncertainty over this particular variable that produces bargaining breakdown in equilibrium (for instance, hiding or fighting with positive probability in contrast with always paying the equilibrium bribe demand). Although the model is quite robust to different specifications for the distribution of *y*, when the level of uncertainty is low, *P* often chooses to submit a low-ball request that will always be approved. To observe this more clearly, Lessing follows Powell and Dal Bó (2009) and specifies $y = \mu + \varepsilon$, where μ is fixed and ε is a random variable with mean zero, distributed over $[\underline{\varepsilon}, \bar{\varepsilon}]$. For tractability, Lessing further assumes that ε is distributed uniformally, which implies that $\underline{\varepsilon} = -\bar{\varepsilon}$. Now, the low-ball result mentioned above is eliminated each time $\bar{\varepsilon} > \frac{\mu}{\varepsilon}$. Since the amount of profits is always positive, it is natural to assume $\bar{\varepsilon} < \mu$. Therefore, to lock in the model and rule out the low-ball outcome, Lessing assumes $\bar{\varepsilon} > \frac{\mu}{2}$, which yields $y \sim U\left[\frac{\mu}{2}, \frac{3\mu}{2}\right]$.

- **Expected sanction from non-enforcement** (*d*)

From the perspective of the enforcer, the parameter *d* represents the summary of all presumed consequences of non-enforcement net of any bribe accepted. It is a reduced-form way of managing the complex dynamics of police corruption. Although not vital for the model's conclusions, Lessing interprets *d* as generally low when corruption is frequent, and high when corruption is rare. The logic is straightforward. First, decompose *d* thus: $d = z_d \bullet \pi_d + \psi$; $\pi_d = f(e_d, \xi_d, \bullet)$

where ψ represents the psychological costs of accepting bribe, z_d is the punishment *P* would suffer on being caught, and π_d is the probability of detainment and successful prosecution. Then, π_d is a function of anti-corruption effort e_d. The government can determine z_d and e_d directly, but a crucial determinant of π_d is the number of other enforcers accepting bribes, represented here by ξ_d. From this initial point, various models[289] of corruption and law-enforcement have derived multiple equilibria. A desirable equilibrium being the one in which there are few law-breakers, so that π_d and therefore *d* are high, providing each officer with motivation to comply. In contrast, undesirable equilibrium is that in which everyone breaks the law, so that any one enforcer faces a low π_d and therefore a low *d*. Empirical evidence further supports the idea that corruption is a multiple-equilibrium game.[290] From time to time Police units and departments

[289] Jean Tirole, "A Theory of Collective Reputations (with applications to the persistence of corruption and to firm quality)," *The Review of Economic Studies* 63, no. 1 (January 1996): 1–22.
[290] Ray Fisman and Edward Miguel, "Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets," *Journal of Political Economy* 115, no. 6 (December 2007): 1020–1048; Benjamin A. Olken and Patrick Barron, *The Simple Economics of Extortion: Evidence from Trucking in Aceh* (Massachusetts: National Bureau of Economic Research Cambridge, 2007).

are cleared of corrupted officers, a fact suggesting that enough state pressure, through changes in z_d and e_d, can change the equilibrium results. Nevertheless, corruption continues to represent an ongoing problem in many places, and it is not clear that nation states face a simple decision choosing whether to have corrupt police or not. Lessing's model does not address this question and considers *d* as exogenous. On the other hand, the model predicts that once a state succeeds in suppressing a culture of corruption, and manages to increase the value of *d*, it would also succed against violent corruption. The more important finding though is that governments can directly manipulate parameters under their control, *s* and *c*, to eliminate violent corruption without any shifts in *e* or *d*.

In summary, once government increases state repression, it provides corrupt enforcers with increased leverage to extract larger bribes from illicit traffickers. Such situation can motivate traffickers to fight back, deploying increased violence against enforcers, which cartels must naturally consider against the increased attention they would bring on themselves should they engage in antistate violence. Therefore, low conditionality government crackdowns, in which cartels are targeted with similar intensity whether or not they engage in antistate violence, can in turn produce violent blowbacks from cartels. Yet, increase in conditionality of repression can substantially shift the results as the increased leverage from threatening enforcers is outbalanced by the additional repression it provokes, and cartels forego violence to adopt hide-and-bribe strategies.

In comparison, conditions favoring violent lobbying are more restrictive. It is pointless to try to force a government to the bargaining table without a viable issue to bargain about, likely some policy which is to be changed or revoked. The susceptibility of any existing policy to violent lobbying is dependant on variety of political factors: international influence, domestic moods, public commitments binding political leaders and their vulnerability to electoral and other political challenges.[291] All of these factors can evolve over time and also in response to occuring violence, often with unpredictable results. Politicians may be exposed to public humiliation if they surrender to cartels' demands once the state is attacked. At the same time, prolonged periods of extreme violence can move the public opinion toward more reconciliatory attitude, as witnessed in Colombia.[292] Generally, existing international commitments to drug prohibition and eradication result in few negotiable issues for states in terms of de jure drug policy. From the variety of contested issues only extradition remained open long enough in the 1980s Colombia to produce sustained violent lobbying, although lower prominence policy questions like prison policy and troop deployment have become subject of occasional violent lobbying across Latin America.

Another condition stems from Scott's original analysis: violent lobbying represents a collective action problem since the benefits from shifting de jure policy are clearly more universal than the benefits of corruption and selective nonenforcement.[293] Considering the fact that benefits from lobbying are nonexcludable, individual cartels would be inclined to take advantage of any cartel willing to bear the costs of a violent lobbying campaign. Therefore,

[291] James D. Fearon, "Rationalist Explanations for War".
[292] Rafael Pardo Rueda, *De primera mano: Colombia 1986-1994, entre conflictos y esperanzas* (Bogotá: Cerec 1996).
[293] Scott, "Corruption".

mechanisms for costs distribution and deterrence of free riders should help make the lobbying efforts efficient, in contrast turf war among cartels should undermine it.[294]

Another relevant factor is conditionality of repression, despite the fact it plays a more subtle role. From the short-term perspective, cartels will likely face increased levels of repression once they launch their campaign of violence. However, cartels seek policy concessions which generally involve a certain level of reduction in repression. When cartels are confident they can achieve such concessions, they are facing the prospect of lower repressions in the future if they carry on the fight long enough. This type a kind of inverse conditionality can represent a strong incentive for violence. Although this inverse conditionality is not inherent in the policy itself, but rather arises from the state's inability to credibly commit to sustaining it in the face of violent lobbying.

Ultimately, in both violent corruption and lobbying, there must be a distinction between violence off the equilibrium path, that is threats which are effective and therefore never executed[295], and the actual, realized violence, and finally, a scenario when cartels do not even make threats of antistate violence. The latter option shall not be mistaken for coerced peace, in which credible threats are made but never executed because in the end some form of agreements is always reached, although both scenarios are free of actual fighting taking place. This difference is actually what motivates cartels to make threats in the first place. Given that executing those threats is costly for all parties involved, actual violence may not be deployed without extra factors driving bargaining breakdown.

Among important drivers of equilibrium violence can be asymmetric information. In the case of violent corruption, public officials and illicit traffickers negotiate over the size of a bribe, but public officials probably do not completely realize the size of profits earned from drug trade, which traffickers have an incentive to conceal. Moreover, both parties have reason to inflate their capacity to cause damage to one another, a capacity which can varies over time and is difficult to assess without the actual fighting. This combination of private information and incentives to misrepresent can result in fighting in equilibrium.[296] Specifically, it might be ideal for the receiving side to reject smaller offers occasionally to avoid the risk of being lowballed[297]; uncertainty regarding the amount of drug profits drives exactly such an equilibrium in Lessing's model, summarized earlier.[298]

The presence of asymmetric information is also responsible for explaining actual violence in violent lobbying. The key question here is whether a cartel is able to make enough credible threats to inflict enough pain to induce the government to make policy concessions. If the answer is known to all parties involved, then no threats are made because the cartel is too weak to make credible threats, and both sides know it, or the threats are made but never executed because the government would concede, and both sides know it.

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[294] Mancur Olson, *The Logic of Collective Action* (Cambridge: Harvard University Press, 1965).
[295] Thomas C. Schelling, *The Strategy of Conflict* (Cambridge: Harvard University Press, 1960).
[296] Fearon, "Rationalist Explanations for War", 395.
[297] Robert Powell, "Bargaining Theory and International Conflict," *Annual Review of Political Science* 5 (June 2002): 10.
[298] Lessing, "The Logic of Violence in Drug Wars".

Predicted Patterns and Observed Outcomes.

The violent corruption analysis presented by Lessing predicts two different empirical patterns.[299] With low conditionality of repression and cartels opting for *plata o plomo* strategy, anytime bribe negotiations fail then violence takes place intermittently and is targeted at enforcers as punishment. Given that enforcers fear cartel violence more than existing sanctions for accepting bribe then unconditional crackdowns make fighting more likely. A distinct pattern appears when a crackdown results in higher conditionality, then cartels change promptly into nonviolent, ''hide-and-bribe'' attitudes towards corruption, with a noticeable decrease in confrontations and violence targeting enforcers.

In comparison, in the logic of violent lobbying, cartels aim to inflict damage on policy-makers instead of enforcers. This results in targeted direct attacks whenever such option is feasible. In cases when political leaders take defensive precautions against physical violence, cartels can then choose to inflict indirect political damage by deploying excessive violence to produce social and economic disruption; terror tactics include car bombings, mass casualty attacks or elite kidnappings. Extensive violence often occurs within limited time frame to create an impression of crisis; cartels can then make an offer to cease the violent attacks if granted policy concessions. Since de jure demands form part of violent lobbying, there is direct albeit unilateral communication with policy-makers, potentially formulated as legitimate complaints to win public support.

Available evidence as well as simple observation indicate that violent corruption seems to be the more prevalent dynamic. Even in Colombia, Escobar first engaged in violent corruption making *plata o plomo* offers to judges and law enforcement since 1976 and continued this practice throughout the subsequent narco-terror period, which if often perceived as a prime example of violent lobbying in its mission to fight the extradition treaty.[300] In contrast, Mexico has not yet witnessed Escobar-style sustained campaign of violent lobbying, although bribes in exchange for non-enforcement are deeply embedded and routinized.[301] In Mexico, the vast majority of targeted killings is directed at local police officers indicating enforcer-focused violent corruption. Even violence aimed at higher level state representatives in seems to be more associated with police corruption than formal state policy in Mexico.[302]

Nevertheless, there were at least some examples of attacks accompanied by public demands on policy-makers to alter existing de jure policy in Mexico. For instance, in 2009 the Família Michoacana PSIN organized street protests, while simultaneously launching attacks on several federal police stations across the state of Michoacán.[303] Then, it made a public plea for dialogue with the Mexican President demanding withdrawal of the federal police forces from Michoacán.

[299] Lessing, "The Logic of Violence in Drug Wars".
[300] Reuter, "Systemic Violence", 277; Salazar, *La parábola de Pablo*, 60.
[301] Luiz Eduardo Soares, M. V. Bill, and Celso Athayde, *Cabeça de porco* (Rio de Janeiro: Objetiva, 2005), 259.
[302] John Bailey and Matthew M. Taylor, "Evade, Corrupt, or Confront? Organized Crime and the State in Brazil and Mexico," *Journal of Politics in Latin America* 1, no. 2 (2009): 3–29.
[303] Grillo, *El Narco.*

The difference between the Colombian and the Mexican case can be partially explained by another variable in anti-state violence, the inter-PSIN competition, which will be discussed in more detail in the following chapter.

In 1984, in Colombia, all the essential prerequisites for violent lobbying were present. When Escobar declared his war on state, the cartels were cooperating under *Muerte a Secuestradores* (MAS) organization he created, which offered mutual-protection for traffickers, but also granted Escobar the authority to collect taxes from members to fund military campaigns.[304] Colombia's extradition treaty had not been judicially enforced, not to mention its implementation was quite strongly opposed by general public.[305] Another relevant factor were the lessons learned from ongoing peace negotiations with rebel groups in Colombia, which convinced Escobar and his fellow traffickers that war could potentially result in eventual reprieve. Had the government defeated the various guerrillas in Colombia, it would not have been forced to recognize their political motivation. Here the traffickers felt their opportunity, for if the government was not strong enough to defeat them, then it would have no alternative than to grant them political status and negotiate.[306]

In contrast, intense fighting among local PSINs in Mexico and former president Felipe Calderón's personal identification with the violent crackdown on traffickers he launched within few days after he assumed office made prospects for lobbying very low. In the Família Michoacana case, its regional scope of operations and virtual hegemony within the state of Michoacán may have eliminated the free-rider issue, while its demands for policy change were seemingly crafted to boost their public image. Nevertheless, the campaign mostly failed to deliver their desired objectives, possibly because they underestimated Calderón's willingness for compromise and policy change, which generally represents one of key factors limiting prospects of successfull violent lobbying.

In the real world, violent lobbying often fails, as demonstrated by the example of Calderón's government rejecting the Família Michoacana's urges for dialogue or its demands to remove the federal police from the state territory. The PSIN's overconfidence in this particular case might have been a factor in the ultimately negative outcome. At the same time, is possible, that unsuccessful campaigns may have initially seemed attractive for the PSIN, with substantial future gains and potentially limited risks where states already chose to deploy high levels of repression.

Identifying what constitutes success in violent lobbying is also difficult. Similar to standard lobbying, violent lobbying tends to be costly and its real impact on usually complex outcomes is hard to measure, especially since politicians have strong incentives to conceal negotiations with PSINs and possible forced concessions from the public scrutiny. For instance, Pablo Escobar was never granted amnesty for his deeds, but he did succeed in negotiating a relatively minor penal sentence in a prison he built for himself. These negotiations were nevertheless held in secret and politicians denied that any compromise was agreed on.[307] The

[304] Chepesiuk, *The Bullet or the Bribe*, 64.
[305] Andrés López Restrepo, "Conflicto interno y narcotráfico entre 1970 – 2005," in *Narcotáfico en Colombia Economía y Violencia*, ed. by Gustavo Duncan and Alfredo Rangel Suárez (Bogotá: Fundación Seguridad y Democracia, 2005), 199.
[306] Ibid., 203.
[307] Gabriel García Márquez, *News of a Kidnapping* (New York: Knopf, 1997); Pardo Rueda, *De primera mano.*

fact that Escobar subsequently waged another war after he fled from his prison suggests that he was actually content with outcomes of his first war on the Colombian state; the fact that his second campaign resulted in a failure to produce similarly negotiated compromises supports the overoptimism hypothesis.

The Variable of Inter-PSIN Conflict Within the Logics of Anti-state Violence

Both violent corruption and violent lobbying represent logics of constraint in their attempt to alter government policy by means of coercive violence. At the same time it is important to realize that PSIN–state conflict often coexists or overlaps with inter–PSIN war for territory, influence, market shares and profits. Such turf war represents a war of conquest with multitude of parties involved and as such deserves an analysis in its own merit. However, it is also relevant for the analysis conducted in this chapter. First, the occurence of a turf war and its levels of intensity may influence PSINs' decision to deploy violent forms of lobbying or corruption vis-á-vis the state authority. Second, a turf war itself can produce incentives for deployment of anti-state violence. In such situations, violence might be potentially directed towards state agents, but its final objective is to conquer a rival territory. Naturally, vast majority of turf war violence still targets rival PSIN members and specific cases when PSINs may find it useful to attack state actors fall outside the logics of constraint outlined earlier.

Violence as an instrument can perform various elemental functions, it may distribute control over territory or other contested asset[308], it may serve to forestall a hostile shift in power[309], it may weaken an opponent or engage his reserves[310], or it can serve no other purpose than to simply inflict pain.[311] There is one more elemental function of violence, which is signalling. From this perspective, acts of violence convey significant information about the perpetrator's operational capacities and capabilities, resolve, internal cohesion, etc.[312]

Frequently, a costly signal in form of violence has seemingly irrational objective. For instance, when a trafficker's sister was kidnapped by the M–19 guerrilla group, Colombian cartels united under the MAS banner to liberate her. In their first direct action the MAS members captured M–19 members, beated them severely and then left them in front of newspaper offices tied, wearing signs announcing "I am a kidnapper".[313] Taking the trouble to identify and then to capture enemy fighters only to release them might seem wasteful effort, but it actually emphasizes the intended message that only an organization with substantial resources and high resolve can afford sending such a costly signal.[314] Fighting in its own merit can convey information because combat experience can raise an opponent's assessment of one's strength.[315] In this particular case the tactic worked, soon after the retaliation the hostage was released and the M–19 never targeted the traffickers again.[316]

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[308] Fearon, "Rationalist Explanations for War."
[309] Powell, "Persistent Fighting and Shifting Power".
[310] Bahar Leventoglu and Branislav L. Slantchev, "The Armed Peace: A Punctuated Equilibrium Theory of War," *American Journal of Political Science* 51, no. 4 (October 2007).
[311] Dal Bó, Dal Bó and Di Tella, "Plata o Plomo?"
[312] Powell, "Bargaining and Learning While Fighting".
[313] Castillo, *Los Jinetes de la Cocaína*, 115.
[314] Michael Spence, "Signaling in Retrospect and the Informational Structure of Markets," *The American Economic Review* 92, no. 3 (June 2002).
[315] Powell, "Bargaining and Learning While Fighting".
[316] Salazar, *La parábola de Pablo.*

In the particular examples discussed above, neither the intended receiver of the violent signal nor its victims were state authorities. Alternatively, violence targeting state actors, such as high-level political assassinations, may be perceived as signals whose intended recipients also belong among state authorities. In such cases, signaling represents only a part of larger violent corruption or violent lobbying strategy designed to influence policy at either the *de jure* or *de facto* level.

There is another possibility, a case in which violence directed against state authorities is meant as a signal to members of the drug trade itself and not to the state. Assassinations of police and judicial officers, attacks on police and military outposts, killings of regional public officials, these can all be perceived as a signal demonstrating willingness and ability for violence while the driving logic here derives from inter–cartel wars, not cartel–state conflict. The ultimate purpose of this violence is to expand existing market share or claimed territory, as opposed to altering official state policies.

In this regard, Reuter recognizes two subtypes of violent signaling.[317] In most cases, signaling represents a component of a competitive strategy designed to intimidate rival PSINs. However, larger and more complex enterprises such as the Mexican PSINs may experience significant internal information asymmetries, especially in cases when the death or apprehension of leaders results in power vacuums and wars of succession.[318] In such circumstanaces, violent signals may be directed towards the PSIN's own members to establish authority. In a related matter, Gambetta discusses the use of violent signals to establish a criminal's bona fides to other illicit actos with whom he intends to cooperate.[319] Although such considerations are probably more frequent in cases where infiltration by undercover agents is among primary concerns.

Contemplating available options, it seems rather unlikely that a cartel would choose to attack state authorities exclusively to communicate its power to competitors or challengers within its organization. At the same time it is important to realize that antistate violence is rare, logistically demanding, and quite certainly more costly than inter-cartel violence, it would therefore send a powerful signal to other PSINs. If a cartel sees any such positive value in sending such signals, it would contribute to the larger decision to adopt a violent strategy towards the state. This channel could therefore contribute to the onset of cartel–state conflict.

It is pointless to send signals unless there is private information to be conveyed. Reuter notes that internal signaling is not expected to occur in market sectors where enterprises are too small for any substantial internal information asymmetries to arise. In comparison, signaling violence should take place rarely when the drug markets industrial organization is stable, since informative signals need to be sent only once. In contrast, state suppressive campaigns that fragment PSINs and result in uncertainty concerning the strength of rivals are likely to enhance this kind of violence.

Generally speaking, the costlier the signal, the stronger resolve it communicates, be it a high-profile political assassinations or tactically ambitious and logistically demanding attacks

[317] Reuter, "Systemic violence in drug markets".
[318] Gabriela Calderón et al., "The Beheading of Criminal Organizations and the Dynamics of Violence in Mexico," *Journal of Conflict Resolution* 59, no. 8 (2015).
[319] Diego Gambetta, *Where They Pushed or Did They Jump?* (Cambridge: Cambridge University Press, 2009).

against state authorities and police or military forces. Powerful signals on their own represent publicly displayed brutally murdered civilian victims and their mutilated bodies in the streets of Mexico. Stability of existing operational environment seems to be correlated with the frequency and urgency of signals transmitted, the less stable the environment the more signals will occur.

Attracting Government Repression to a Region Under Rival's Control

Calentar the plaza (that is to heat up the local drug trade turf), refers to the idea of using violence, specifically violence against local and state authorities, to deliberately attract government repression to a territory under a rival's control, in order to interfere with their profit-generating activities. This category also includes the so called "black flag" operations, which are purposefully designed to create the false impression that an attack was carried out by another party, but it also extends to cases where it is sufficient to generate doubt or a sense of urgency that will later attract a response in a form of a strong government repression. Inevitably, this tactic in deploying violence may result in false claims and public disputes about the true perpetrators of violent events. For instance, such disputes occurred in 2009 after the grenade attack in Morelia, Michoacán, on a crowd celebrating Mexican independence. La Família Michoacana, the dominant PSIN in the area at that time, immediately fell under suspicion as the likely perpetrator of the attack. The organization ardently denied responsibility, while blaming their rivals Los Zetas for the act. They were also sending messages to journalists and hanging narcomantas pleading "Don't let them fool you: La Família of Michoacán is with you and does not agree with acts of genocide".[320]

Quite obviously such logic is driven by turf war among PSINs. One of its prerequisites is that the target PSIN suffers from lesser than maximum repression, possibly because it has forged a pact with the government or is actively pursuing a *modus vivendi* with the authorities. Alternatively, the reason could be that the government applies repression conditionally and the PSIN has previously limited its use of violence. The attacking PSIN must find itself in a position to gain by exposing the target rival to additional repression, while not being excessively troubled by exposing itself.

The predicted empirical footprint is conveniently illustrated by the example mentioned above: since the goal of this violent tactic is to attract attention both from the public and from the state authorities, it is logical to target civilians with terror attacks. It could also make sense to target the state forces, assuming that authorities would not be able to discover the identity of the perpetrator from the attack. Additionally, black flag violence is likely to result in subsequent propagandistic campaigns in which responsibility for the violence is disputed.

Such follow up disputes make *calentar la plaza* type of violence more difficult to identify in practice, although those rather restrictive conditions which make this tactic sensible make it relatively rare. Nevertheless, it is worth mentioning that this particular channel, in comparison to others, could be augmented by conditional crackdowns. For instance, if the government's policy is to increase repression against any PSIN that engages in antistate violence, then thw PSINs are incentivized to try to frame their rivals in order to expose them to

[320] Marc Lacey, "Grenade Attack in Mexico Breaks From Deadly Script," *New York Times,* September 24, 2008. https://www.nytimes.com/2008/09/25/world/americas/25mexico.html?mtrref=www.google.com&gwh=163E4ACBE45529D8083B7288E3F9FB50&gwt=pay.

additional state repression. For this particular reason, appeals for more conditional approaches to PSIN repression should emphasize the prerequisite of improved police intelligence collection capabilities.

3.2. Critical Assessments of Existing Strategies

With the previous chapters shedding light on the strategic nature and systemic context of the drug war, this section will first provide a critical assessment of existing policies and counter-strategies. Subsequently, I will outline additional angles and venues, which, in my opinion, represent viable expansions of existing approaches designed to disrupt the PSINs operations and limiting their power. The suggestions provided will mostly focus on offensive military and law inforcement operations directed at disrupting PSINs. By no means these recommendations list is presumed to be an exhaustive analysis of all possible approaches, I will only mention those I deem both viable and feasible.

In contrast, I will only discuss civilian components of a disruptive strategy, such as drug user rehabilitation or legalization, in the chapter below. These aspects have been extensively addressed in numerous scholarly works and in public debates, which makes there key arguments and proposition widely known, and therefore I believe only their critical evaluation is of essence.

Three underlining assumptions need to be introduced and recognized in contemplating counter-strategies: (1) there will always be people willing to take drugs for variety of motives, which makes the root causes behind drug-consumption persistent even at varying degree of intensity; (2) there will always be people willing to engage in illicit profit-generating business activities, in other words, illicit activities will always represent and economically viable option; and (3) due a to a complex agenda states manage they will never be able to allocate all their resources and attention exclusively to counter-strategies aimed at profit-seeking illicit networks, which, in turn, can focus all of their attention on survival and market success – in this regard, strategic initiative will always be with the latter. This general logic will be the guiding principle in formulating assessments in the chapters to follow.

Contemplating strategic implications of the above mentioned assumptions, in the drug trafficking industry manageable order is all we can reasonably strive to achieve. Order, where drug traffickers and their commercial activities will be tamed to the point that the whole issue reaches below the noise level. The key question here is how to achieve this outcome, what strategy to deploy. Personally, I believe there are are two key and interconnected centers of gravity in the drug industry: financial profit or simply money, the single most important motivation behind these illicit enterprises, and the supportive logistic infrastructure able to legitimize illegal gains and channel them into licit economic endeavors to gain and spread influence. The following pages will be dedicated to analyses and critical assessments of existing counter-narcotics strategies and with their successes and failures evaluated with regard to the above mentioned centers of gravity. The resulting conclusions will provide basis for postulating further and hopefully more effective disruptive strategies.

One of the key assumptions driving my assessments of existing policies is that individuals responsible for formulating strategy of the drug war often seem to demonstrate a selective understanding of economics. It may be the case that most politicians, military and law enforcement officers prefer to perceive the problem from their professional standpoint, but in

the following paragraphs I will try to provide an economic assessment of the most common counter-narcotics policies deployed to date with the ambition to demonstrate that the world has plenty to learn from analyzing illicit activities as business instead of a war or a moral crusade.

The similarity between legitimate and illicit entrpreneurs is striking, from their troubles with human resources to the threat posed by online retailers. Equally noticeable is the frequency with which policies aimed at stifling the drug trade seem to be misdirected. Regulatory approaches that in the legitimate business world would be discarded for their obvious ineffectiveness have been allowed to endure for years, or probably decades, in the counter-narcotics world. From a thorough examination of exisiting attempts to disrupt the illicit drug industry four major mistakes emerged hampering the mission.

Prevailing Obsession With the Supply Side

Ever since the Nixon's declaration of war on drugs, the relentless focus has been on the supply side of the industry, that is the traffickers, despite the fact there is an overhelming case for prioritizing the demand side instead, that is the drug consumers.

The multinational effort to disrupt the supply of coca leaves in the Andes by spraying the region with herbicides has achieved remarkably little to alter the prices of cocaine, in spite of decades of investments and even violence deployed in the process. One of the reasons for this limited success is that the PSINs have used their buying power to force farmers to absorb any increase in costs, just as Walmart squeezes its suppliers in the legitimate business world. More significant, the cost of the cocaine's raw material, the coca leaf, is simply too low to have much impact on the final price of cocaine. The amount of leaves required to produce a kilogram of cocaine powder costs only a few hundred of dollars. Even doubling the cost of growing coca adds less than one percent to the price of the final product, which at some places in the United States sells for as high as $80,000-100,000 for a kilogram. Should the supply side be attacked properly, it would be at the end of the production and distribution chain, in the consumer countries, where the market value of the product is much higher and its confiscation can actually cause some economic damages to its sellers.

There is another reason why almost exclusive focus on the supply side is misdirected, although such an approach may yield limited positive results. When the price of a product increases, the amount consumed generally decreases, although the size of the drop in consumption varies. For some goods, the demand is elastic, in other words, it falls substantially in response to even a minor increase in price. In contrast, demand for some products is inelastic, which means that customers continue buying fairly the same amount as befire, despite the raise in price. Naturally, measuring elasticity in the drug markets represents a challenge, because the data on both prices and levels of consumption are extremely hard to verify. Nevertheless, available evidence suggests that demand for narcotics is inelastic. One of the surveys quoted studies suggesting that the elasticity of demand for marihuana in the United State was roughly -0.33, which means that a 10% raise in price would result in only a 3.3% fall in demand. Similarly, other studies measured the likelihood of narcotics detected in the urine tests of

arrested individuals and there was even a weaker relationship observed, specifically -0.17 for cocaine and -0.09 for heroin.[321]

The notion that demand for drugs is inelastic fits with intuition, especially in cases of substances which are addictive. For instance, heroin addicts are unlikely to give up consumption of their drug simply because the price increased a little. Similar logic applies for other illicit activities, the PSINs have been diversifying into over the recent years, namely the smuggling of people. Despite the fact that stricter patrolling of the U.S. border has increased the costs of crossing illegally, the increase in price has not been substantial enough to make impact on demand for passage into the United States. The demand for people smugglers seems to be just as inelastic as the demand for narcotics. Once again, such observation has logical background. Motivated by prospects of reunification with their families, finding employment with higher wages, etc., illegal migrants will not be discouraged by relatively minor increase in price of the crossing.

The inelasticity observed in demand for illicit goods and services has some important implications for supply side driven policies. It means that even substantial success in increasing the cost of narcotics, or illegal border crossing for that matter, will produce only modest results in lowering the number of customers purchasing drugs or planning to cross the U.S. border illegally. In other words, national governments are spending large amounts of resources to achieve only minor gains. Another factor worth considering is even more interesting. Significant increase in prices, together with only minor decrease in demand, which might be presented by the law enforcement as a successful outcome actually means that the value of the market grows. To provide an example, marihuana dealer sells one kilogram of his product every week, for a retail price of $10, that is $10,000 total. After increase in law enforcement and policing in his area of operations he is forced to increase the price by 10% to $11. Considering the elasticity calculation mentioned earlier, this increase in price by 10% should produce a 3.3% drop in demand. In consequence, the dealer will now sell only 967 grams of marihuana weekly, for $11 per gram, with the new total of his sales rising to $10,637 per week. In other words, increase in law enforcement noticeably increased prices, but consumption lowered only modestly and the profit of illicit economy grew larger.

Contemplation of a demand side driven policy provides an interesting comparison. Instead of focusing on more law enforcement and better policing, the local authorities in the above mentioned scenario would try to discourage people from taking drugs by launching public health campaigns, building leisure facilities for teenagers, improving rehabilitation programs for addicts, etc. With lower number of customers, the demand decreases. The likely response from the dealers would be to lower the prices in order to gain advantage against their illicit business rivals, who all compete for a smaller pool of consumers. In consequence, both the number of customers and the value of illicit market is reduced, which represents a success on two fronts. Similar logic could be applied to other illegal markets as well. For instance, instead of focusing exclusively on people smugglers running the supply side of the illegal migration, it might prove useful to actually focus on diminish the demand for illegal border crossings. For example, a positive measure could represent more visas issued to interested parties so they do not have to seek illegal means of crossing and a negative measure could make

[321] Peter Reuter, *Understanding the Demand for Illegal Drugs* (Washington, DC: National Academies Press, 2010).

the United States a more difficult place to live without proper visa and other legal documentation. One way or another, reduction in number of people wanting to cross borders illegally would lower the number of clandestine crossings as much as the prices charged by people smuggling groups.

Regardless of illicit activity under discussion, even beyond narcotics and illegal border crossings, the key observation remains the same. While attacking the supply side can only reduce consumption by increasing prices, and in process the illicit revenues as well, attacking demand can produce both.

Ineffective Resources Allocation

In many countries, when it comes to crime fighting, money is not a problem as long as it is spent on enforcement rather than prevention. Hoping to increase their popularity with general public, politicians often claim that public security is priceless. With political support, many law enforcement agencies and units enjoy generous budgets, which enable them to supply their officers with advanced weaponry a sophisticated military technologies. The militarization of police forces across the Western countries, at least in terms of weapons and equipment, is particularly visible in the United States, where the Department of Homeland Security disbursed some $35 billion to state and local police forces between 2002 and 2011. In consequence, it is not unusual even for police departments in smaller towns with low crime rates to enjoy assault rifles and armoured personnel carriers. In Mexico, substantial amount of financial assistance provided under the Merida plan was also used towards a purchase of sophisticated weaponry from the U.S. companies.

In contrast, money spent on prevention is audited with great care. In times when overall funds become scarce, prisoners, drug addicts and other offenders tend to be among the first to feel the lack of funding. To some extent, it is understandable that the general public will be more inclined to see a drop in money spent on these individuals than on other social programs. But, in the long term perspective this principle is would prove expensive to uphold.

Cutting funds for education and rehabilitation programs in prisons can save several thousand dollars. What is often times an underappreciated fact is that this short term cut in funding may results in few inmates failing to learn to read or achieve some degree of education while incarcerated, in consequence their likelihood of finding a decent employment diminishes, they can resume their drug addiction, all of which can result in additional future offenses. The point here is not to argue sympathy for legal offenders, the point is economic one, because in the end, the initial saving of a few thousand dollars has proportionatelly larger costs later. One RAND Corporation study attempted to calculate how much cocaine consumption could be prevented by different government interventions.[322] In its estimate every $1 million dedicated to controlling supply in source countries of Latin America could produce a reduction of some 10 kilograms in the total amount of cocaine consumed in the United States. In comparison, prevention programs in school would achieve higher efficiency, with some 25 kilograms per $1 million, and treatment programs for drug addicts would mark even larger success averting up to 100 kilograms of cocaine. In other words, treatment might be as much as ten times more cost effective than enforcement, possibly because it addresses demand rather than supply. The

[322] "The Benefits and Costs of Drug Use Prevention," *RAND Corporation*, 1999, http://www.rand.org/pubs/research_briefs/RB6007/index1.html.

seemingly unattractive truth is that it is cheaper to cure people from a drug addiction than to chase them down in a armoured personnel carrier.

There are many more examples available to demonstrate that diverting funds towards a problem early may save expensive cures later. These cases of relatively cheap prevention include for governments across the Carribean countries to spend more money on providing security for inmates in their prisons so these individuals do not run to cartels for protection making themselves available for recruitment. In Colombia and later Mexico drug traffickers have long engaged in sort of corporate responsibility programs winning hearts and minds of low income individuals in their areas of operation. If the Mexican government spend less on modern weaponry and more on inclusion of its poorer citizens, it might yet again limit the influence of PSINs in this regard. Similarly, it might prove to be financially more beneficial for the Andean governments to subsidize their farmers to motivate them to grow tomatoes instead of coca, not to mention the funds saved on destruction of coca fields by force later on. It would also be cheaper to design and implement programs assisting youth in securing a viable income through sustainable employment than to chase them down once they decide their career prospect is connected to local gang. In the United States, helping painkiller addicts with their rehabilitation would be certainly cheaper and lot easier than dealing with these individuals once they fall for heroin. All these are merely random suggestions and only some ideas from a larger pool of cost effective cheap prevention options.

It became popular to call for more spending as a solution to every other social problem in the world. When it comes to illicit narcotics, there is more than enough money being spent already, the funding is just focused on the wrong area.

Thinking Globally, Acting Locally

Illicit drug traffickers have embraced all the benefits globalization had to offer and expanded the volume and quality of their activities to build borderless enterprises spanning across several countries and various continents. In comparison, vast majority of attempts aimed to disrupt the PSINs remained mostly national in focus and scope. This approach resulted in many examples of relative success in one country, while at the same time there was a proportionate failure in another. In Latin America this phenomenon is known as the cockroach effect and it refers to a situation when a drug business driven out from one place soon emerges in some other location. For instance, in 1990s, coca cultivation was pushed out of Peru, which was presented as remarkable success for counter-narcotics struggle, only to appear in Colombia soon after.[323] Some decade later, another success was declared when coca cultivation was forced out of Colombia, re-appearing again in Peru.[324] Despite these two achievements the UN vocally promoted, remarkably little had actually changed.

The very same kind of dynamic appears on the trafficking side of the business. Once the smuggling routes through the Caribbean were closed by law enforcement in the 1980s, cocaine shipments shifted towards Mexico. Increased counter-narcotics effort there persuaded the

[323] Thalif Deen, "DRUGS: UN Body Praises Peru, Bolivia for Slashing Output." *Inter Press Service*, March 7, 2000, http://www.ipsnews.net/2000/03/drugs-un-body-praises-peru-bolivia-for-slashing-output.
[324] „UNODC Reports Steep Decline in Cocaine Production in Colombia," *UN Press release*, June 19, 2009, http://www.unodc.org/unodc/en/press/releases/2009/june/unodc-reports-steep-decline-in-cocaine-production-in-colombia.html.

PSINs to direct there transportation operations towards weaker states in Central America. Nowadays, when Central America is attracting more attention from counter-narcotics agencies, shipments might very well find their way to the Caribbean soon again.

PSINs have also demonstrated their flexibility in addressing the proper retail markets. In the early 2000s, cocaine consumption in the United States decreased notably while at the same time it became more popular in Europe. Overall, when it comes to production, transportation or retail distribution, the only partial success has been witnessed on the national level while the global situation does not change much. Therefore, from the national level perspective, solving your problem practically means making it someone else's problem.

To some extent it is understandable that national governments do not concern themselves that much with affairs beyond their state borders. The main trouble here is the asymmetry, that in contrast to national governments, PSINs are multinational enterprises without any multinational counterpart with a mission to suppress them. The United Nations office of Drugs and Crime comes closest. Unfortunately, it seems to be deeply committed to promote the supply-side suppression strategy while largely neglecting the policy's shortcomings and very modest aggregate results. In the legitimate corporate business environment, if a multinational company tried to do the same, that is to highlight strong results in one market while displaying a tendency to underplay the disappointing results in others, it would not get away with it for long.

The reason why a faulty strategy remains in effect is that the most influential UN stakeholders are reasonably satisfied with the way the drug war is being faught. Wealthy countries, which also represent majority of world's narcotics consumers, are happy as long as the violent fighting takes place as far as possible from their own populations.

Disruptions to narcotics-supply networks are most effective when they happen at the end of the supply chain, when the product has its highest value and its confiscation is therefore most damaging to the illicit entrepreneurs. In contrast to this logic, the United States and other wealthy consumer countries seem to take more pragmatical approach while waging the counter-drug war on its soil as compared to efforts abroad. Allegedly, four in ten Americans have admitted to their experience with illicit narcotics, a ratio which suggests certain level of tolerance for drugs, as long as it comes without violence. In comparison, foreign countries that fail to meet drug consumption and trafficking with resolute denouncement are often times singled out for punishment in shape of public shaming, back-channel punitive use of American influence with international agencies like the IMF of the World Bank. [325]

To some extent, the structure of the global drug market has made the political deadlock inevitable. Most countries have fallen into one of the following categories: the drug producing countries, like Peru or Colombia; the drug trafficking countries, like Mexico; and the consumer countries, such as the United States or Europe. In consequence, individual governments and their voters, have seen only certain aspects of the illicit drug trade. The end consumer countries, hoping to limit the influx of illicit narcotics, have argued for a strong attack against the supply chain of narcotics since its early stages, despite the fact that such approach has proven

[325] Naím, *Illicit*, 80.

ineffective. In comparison, drug producing and trafficking countries do not see the logic of violently engaging a phenomenon which is taking its toll mostly outside of their borders.

These perception angles have been changing though, as the two main global trends began to push all the countries involved to realize the complexities of global drug trade. On one hand, the categories of producing and consuimg countries are becoming more blurred as the interests of both are aligning. Narcotics are mostly consumed by middle-class customers, as developing countries become richer, the economic status of many of its citizens improves, which makes consumer goods more affordable, among them illicit narcotics. At the same time, countries that have been historically on the consumer side have seen growth of their domestic drug production, mostly marihuana and systetic drugs. This changing experience has impacted the host countries' perception and they came to realize that attacking supply side is truly ineffective. Facing this new experience on its soil, the United States, for instance, have opted for legalization of marihuana instead of crops eradication, which it promoted across Latin America earlier.

The other significant trend in global politics of counter-narcotics is a shifting balance of power. Historically poorer countries that have been the hosts for producers as well as traffickers are becoming richer and their voice is gaining importance. From the perspective of UN's Officer of Drugs and Crime, growing portion of its funding is now coming from emerging donor countries, which often display different attitudes towards counter-narcotics than traditionally large donors such as the United States. Many of these new donors, such as Russia or China, have demonstrated rather hawkish attitude by strongly supporting punitive anti-drug policies at home. On the other hand, countries like Colombia or Brazil have been long frustrated with existing approach to drug control relying on enforcement-focued approach. The resulting observation is that international drug-control regime is in play much more than it has been in the last century.

Prohibition v. Control

Despite decades of drug prohibition enforced across the Western countries with more than $1 trillion spent by governments worldwide, and decades since the United States declared their war on drugs, the current world seems to be everything, but a drug-free environment.

For many years, the main promoters of drug legalization had been the marihuana smokers, who argued that society is already tolerating other and often more dangerous substances than marihuana. Despite the fact that this argument has its merits, it failed to gain universal public support. Likely, because most countries have been already dealing with enough issues on their own and legalization of drugs could bring even more problems. Yet, in recent years this attitude seems to be changing. Not that the public would change its opinion about negative effects of drug consumption, but in light of the Mexican drug war and other drug-related violence, many people are developing an opinion, that bringing the drugs within the legal system offers at least some degree of control as well as an opportunity to limit the power of drug trafficking PSINs.

The recent example of Colorado might provide an example how legally regulated drug market would look like. Since marihuana was legalized there, drugs are tested for their strength and safety. They are clearly labeled in safe containers and sold in limited quantities to individuals over the age of 21. During the first year, the state gained some $76 million income

from taxation and licensing, while saving money on drug-related arrests. Some $700 million worth of sales have been taken away from PSINs and other trafficking entities. The impact n consumption is yet difficult to assess, since there are many out-of-state visitors and consumers, but legalization does not seem to provoke massive consumption. Many other US states followed Colorado's example and the tendency to legalize has its examples across the Americas with Uruguay implementing full legalization of marihuana in 2014 and Jamaica allowing consumption for medical and religious purposes.

Surprisingly enough, even for the most dangerous drugs some form of legalization might provide unexpectedly positive results. The driving motivation is not that drugs are safe, but a full recognition that they are extremely dangerous. Although these particular case have not been widely publicized, Switzerland, Netherlands and the UK have already legalized heroin in a very limited way. Their programs are not involving drug sales like Colorado, but they allow specialized physicians to prescribe free heroin to addicts. The key assumption is that through managed, rationed use, addicts are gradually able to overcome their addiction. In Switzerland, where the program has been most established, doctors prescribed heroin to some 3,000 addicts, who represented some 10-15% of country's users, but their collective consumption accounted for some 60% of Switzerland's total consumption of heroin. Providing them with free heroin in controlled and supervised conditions, the number of robberies these addicts committed decreased by 90%.[326]

Removing heavy users from the market takes away the industry's most valuable customers, which makes the heroin market far less viable from the perspective of demand. Dramatic drop in demand naturally results in heavy impact on supply. Considering that most of the heavy heroin addicts were also engaged in trafficking of heroin and its distribution in order to gain funds for their addiction, removing them from the market also heavily limits the local dealership network. In Zurich, there were 850 new addicts registered in 1990, in 2005, it was 150.[327] Interestingly enough, legalizing heroin through a strictly limited medically supervised program has made the drug harder to access than prohibition ever did.

3.3. Towards Complex Counter-strategy and Beyond

In previous sections of this dissertation both subjective and objective analyses of the illicit trafficking has been conducted in order to provide key insights upon which an effective complex disruption strategy can be formulated. In the last chapter existing policies were evaluated. Besides positive systemic economic assessments there is one more aspect which deserves to be included so that complex disruptive strategies can be propetly outlined, which is the role and importance of individuals in PSINs as well as their larger organizational assessments. Many of the following recommendations are much more hardline approach to the illicit narcotics and networks problem and should be perceived as complimentary to constructive and economically viable suggestions provided in the previous chapter.

[326] Tom Wainright, *Narconomics: How to Run a Drug Cartel* (New York, NY: Public Affairs, 2016), 253.
[327] Asma Jahangir et al., *War on Drugs: Report of the Global Commission on Drug Policy*, June 2011, http://www.globalcommissionondrugs.org/wp-content/themes/gcdp_v1/pdf/Global_Commission_Report_English.pdf.

Social Network Analysis

The key ambition of this chapter is to analyze a illicit drug trafficking enterprise as a network using social network analysis (SNA) and various of its metrics (i.e., centrality, and brokerage) that would be helpful in identifying strategies for disrupting its operations. Any attempt to disrupt and undermine an illicit network must begin with a strategy that identifies key vulnerabilities (e.g., actors) within the network that can become targets and SNA can be particularly helpful in this regard. Normally, the actors identified by SNA are positioned in key places within the network that connect various segments of the network and facilitate the flow of information and other resources. This chapter draws on some of these metrics to identify members of the Sinaloa cartel who occupy these important positions within the PSIN. These individual metrics can later be visualized in a sociogram where nodes represent the actors and ties represent the lines between them. The Sinaloa cartel was selected due to its prominent status it seemingly achieved in public perception as one of the most powerful illicit drug trafficking enterprises in Mexico during the Calderón administration. It is not meant to provide exhaustive analysis of all PSINs across the region, but to illustrate the key points and features using a prime example among illicit enteprises in Latin America.

Centrality and key player metrics are practical to the study of transactional PSINs, such as the Sinaloa cartel, which are not tied to a single specific location and which are not dependant on a single commodity in their business portfolio.[328] If necessary, the Sinaloa cartel can organize for a particular operation and then disperse rapidly without attachment to any man, weapon, or equipment left behind. For this particular reason, it is of critical importance to apply the appropriate form of network analysis and to understand what makes each member different a unique is. Centrality metric is convenient in identifying high-value targets, but a thorough and complex analysis should be not limited to using only one centrality or key player measure nor propose a single strategy. Instead it should draw on various metrics and formulate a wide array of strategies, especially when tackling resilient and flexible entities, such as the Sinaloa cartel.[329] Indeed, because the Sinaloa cartel has a proven resiliency, flexibility, and fluidity in its network – qualities that stem from the ways in which ties are constantly formed and strengthened, or weakened and broken[330] – an aggressive disruption strategy is desirable, with its tactical components being capable of a simultaneous, omni-directional attack.[331] Identifying key leadership figures and other central players is a vantage point for unraveling the Sinaloa cartel's organizational structure.[332] With tools, such as UCINET, and ORA, it is possible to map its organizational structure and then use this knowledge to formulate disruptive strategies.

Data

Analyzing the the Sinaloa cartel network, operational ties were used to extract information from open sources, such as newspapers, Internet websites, blogs, books, journals, government reports, court documents, and Spanish as well as English press reports. One of the

[328] Ori Brafman and Rod A. Beckstrom, *The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations* (New York, NY: Portfolio, 2006), 18.
[329] Nancy Roberts and Sean F. Everton, "Strategies for Combating Dark Networks," *Journal of Social Structure* 12, no. 2 (2011), http://www.cmu.edu/joss/content/articles/volume12/RobertsEverton.pdf.
[330] Williams, "Transnational Criminal Networks", 67.
[331] John Arquilla and David Ronfeldt, *Swarming and the Future of Conflict* (Santa Monica: RAND, 2000).
[332] Arquilla, *Networks and Netwars*, 31.

advantages of open source data is its timeliness. On the other hand, contents and accuracy are often among its weaknesses. The information collected must be questioned and corroborated to prevent the risk of using misleading or false information. I am confident that the data used here are both accurate and appropriate for analysis. Nevertheless, the network illustrated in this chapter is only a snapshot in time, but it should provide a valid operational picture of the Sinaloa cartel network towards the end of Felipe Calderón's administration.

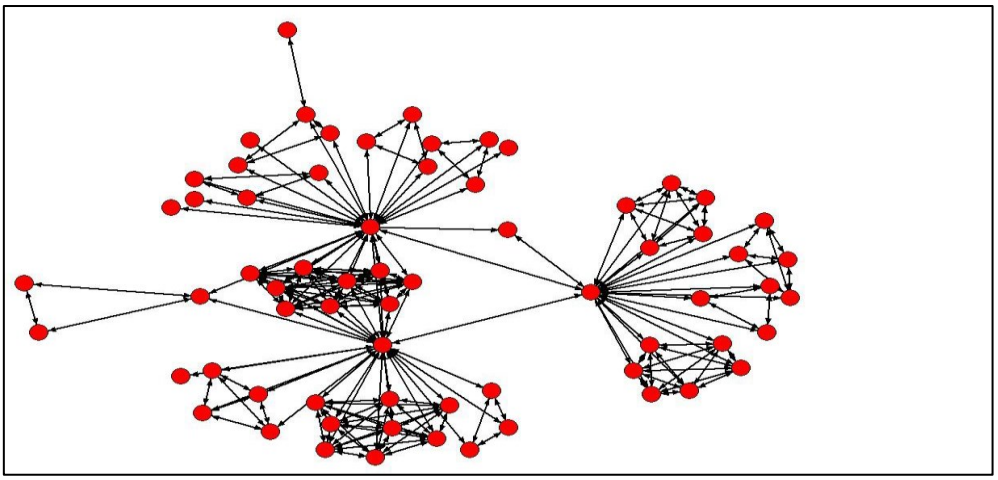
Operational Ties

In Klerk's argument, in order to achieve an understanding of an illicit enterprise, it is vital to pay attention to social phenomena, such as schools attendance, individual roles played by key actors, their internal communication, etc.[333] This chapter later uses operational relationships to assess, analyze and formulate counter strategies to disrupt the Sinaloa cartel's illicit network. Initially, the operations relationship data of the 171 actors of the network was coded. Out of these, 104 isolates, that is actors with minimal or no ties, were then removed due to the assumption that the probability of an isolate having a strong relationship with the main network was minimal. Therefore, it was possible to focus on the network's most prominent actors and not waste resources on monitoring non-essential individuals. It is assumed that the Sinaloa cartel relies on ties of trust among its members and management, which represent potential lines of communication, coordination, and control. Moreover, such ties are occasionaly presumed as latent ones, but they can be activated promptly when needed.

Software Tools

The coding work of the Sinaloa cartel relationship network was initially prepared in Palantir Government,[334] a software for integrating, integrating, and visualizing different types of data, including unstructured, structured, temporal, relational and geospatial information. Palantir Government can analyze friendly, threat, neutral and clandestine human terrain in a multi-dimensional environment. The data initially structured in Palantir were later exported to a social network analysis program UCINET.[335] The network drawing program NetDraw, which is integrated with UCINET[336], was used to visualize the Sinaloa cartel network. Sociogram 1 below represents a sociogram of the Sinaloa cartel operational network.

[333] Peter Klerks, "The Network Paradigm Applied to Criminal Organizations: Theoretical Nitpicking or a Relevant Doctrine for Investigators? Recent Developments in the Netherlands," *Connections* 24, no. 3 (1999): 56.
[334] Palantir Government, http://www.palantirtech.com/government.
[335] UCINET, http://www.analytictech.com/ucinet/.
[336] ORA-LITE, http://www.casos.cs.cmu.edu/projects/ora/.



Sociogram 1: the Sinaloa Cartel Network

Centrality Metrics

Among the oldest concepts in SNA is actor centrality, which is deployed substantially in the following analysis of the Sinaloa cartel. There is a number of different measures of centrality, each with its own assumptions of what constitutes a central actor. For the purposes of this dissertation, four types of centrality are considered: closeness, degree, betweenness, and eigenvector centrality. Each of these type is discussed below as the Sinaloa cartel network is analyzed.

Closeness Centrality

A member is considered central if it can quickly interact with all others. In the context of a communication relation, such members do not depend on other members for the relaying of information and can be very productive in communicating information to others, a capability vital for the cartel's problem solving and management.[337] Table 2 below highlights the top ranked Sinaloa cartel network members in terms of closeness centrality.

Rank	Node	Closeness
1	Joaquín "EL CHAPO" Guzmán Loera	0.641
2	Ismael "EL MAYO" Zambada García	0.629
3	Juan José "EL AZUL" Esparragoza Moreno	0.579
4	Gonzalo "EL MACHO PRIETO" Inzunza Inzunza	0.462
5	Cenobio Flores Pacheco	0.462
6	Armando López Aispuro	0.462
7	Guillermo Nieblas Nava	0.462
8	Felipe De Jesús Sosa Canisales	0.462
9	José Javier Rascón Ramírez	0.462
10	Jesús Alfredo Salazar Ramírez	0.462
11	Ramón Ignacio Páez Soto	0.462
12	Raúl Sabori Cisneros	0.462

Table 2: Closeness (Freeman) Centrality Top Members of the Sinaloa Cartel

[337] Wasserman, *Social Network Analysis,* 178–179.

Joaquín “EL CHAPO“ Guzmán Loera and Ismael “EL MAYO“ Zambada García, two of the four founders of the organization, are the most central members in the network. They both yield similar power in management and communication with others. Juan José “EL AZUL“ Esparragoza Moreno manages large money laundering operations for the Cartel. Gonzalo “EL MACHO PRIETO“ Inzunza Inzunza is the chief assassin for the two Cartel leaders, operating in northern Mexico. Remaining members are local leaders supervising trafficking operations in the border region, from Baja California to Sonora.

Degree Centrality

A member with a high centrality level, as measured by its degree, is “where the action is” in the network. Thus, this measure focuses on the most visible actors in the network. An actor with a large degree is in direct contact or is adjacent to many other actors.[338] Table 3 indicates the count of the number of the Sinaloa cartel network node’s ties.

Rank	Node	Degree
1	**Joaquín "EL CHAPO" Guzmán Loera**	**0.43939**
2	**Ismael "EL MAYO" Zambada García**	**0.42424**
3	**Juan José "EL AZUL" Esparragoza Moreno**	**0.31818**
4	**Gonzalo "EL MACHO PRIETO" Inzunza Inzunza**	**0.15152**
5	**Cenobio Flores Pacheco**	**0.15152**
6	**Armando López Aispuro**	**0.15152**
7	**Guillermo Nieblas Nava**	**0.15152**
8	**Felipe De Jesús Sosa Canisales**	**0.15152**
9	**José Javier Rascón Ramírez**	**0.15152**
10	**Jesús Alfredo Salazar Ramírez**	**0.15152**
11	**Ramón Ignacio Páez Soto**	**0.15152**
12	**Raúl Sabori Cisneros**	**0.15152**

Table 3: Degree Centrality Top Members of the Sinaloa Cartel

High scores marked by Joaquín “EL CHAPO“ Guzmán Loera and Ismael “EL MAYO“ Zambada García indicate they are making strategic decisions, supervising operations and giving orders without significant use of proxies. Lower scores observed in the remaining positions suggest these members take decisions with limited impact, mostly localy or within their particular areas. In terms of lower scoring individuals another measure would be needed as a discriminator for target prioritizing.

Betweenness Centrality

Betweenness centrality assumes that an actor has a power over any two other actors when it lies on the shortest path between them in a given network.[339] Table 4 identifies actors in a network who are in a position of brokerage, possessing the power to control the flow of resources through the network, actors with more interpersonal influence.[340]

[338] Wasserman, *Social Network Analysis,* 178-179.
[339] Sean F. Everton, *Tracking, Destabilizing, and Disrupting Dark Networks with Social Network Analysis* (Monterey, CA: Naval Postgradate School, 2009).
[340] Wasserman, *Social Network Analysis,* 188-189.

Rank	Node	Betweenness
1	Joaquín "EL CHAPO" Guzmán Loera	0.21895
2	Ismael "EL MAYO" Zambada García	0.20270
3	Juan José "EL AZUL" Esparragoza Moreno	0.20215
4	Alejandro Flores Cacho	0.02560
5	Augustín "DON PILO" Reyes Garza	0.02610

Table 4: Betweenness (Freeman) Centrality Top Members of the Sinaloa Cartel

Neither Alejandro Flores Cacho nor Augustín "DON PILO" Reyes Garza appeared in the previous listings. Alejandro Flores Cacho manages large distribution network affiliated with the Cartel, hence his accessibility to external resources. Augustín "DON PILO" Reyes Garza manages some of the Cartel's contacts in Colombia, particularly with Jorge Luis Llanos Gazia in Cali.

Eigenvector Centrality

Eigenvector centrality assumes that ties to highly central actors are more important than ties to peripheral actors, so it weights an actor's summed ties by the centrality of the actors with whom ties exist.[341] From the perspective of the Sinaloa cartel, table 5 below suggests who has direct connections to the center of gravity within the network, to high ranking figures giving orders and who might be then considered important through his direct participation in the chain of command and operational structure of the cartel.

Rank	Node	Eigenvector
1	Ismael "EL MAYO" Zambada García	0.375
2	Joaquín "EL CHAPO" Guzmán Loera	0.327
3	Gonzalo "EL MACHO PRIETO" Inzunza Inzunza	0.261
4	Cenobio Flores Pacheco	0.261
5	Armando López Aispuro	0.261
6	Guillermo Nieblas Nava	0.261
7	Felipe De Jesús Sosa Canisales	0.261
8	José Javier Rascón Ramírez	0.261
9	Jesús Alfredo Salazar Ramírez	0.261
10	Ramón Ignacio Páez Soto	0.261
11	Raúl Sabori Cisneros	0.261
12	Ismael "EL MAYITO" Zambada García	0.102

Table 5: Eigenvector Centrality Top Members of the Sinaloa Cartel

Gonzalo "EL MACHO PRIETO" Inzunza Inzunza's position right below the top suggests his key position as high ranking operative acting on direct orders from the Cartel leaders. Remaining members score high because they assume operational command in their area of operations, which links them to the decision makers. Ismael "EL MAYITO" Zambada García's score is a result of the connection to his father.

[341] Everton, *Tracking, Destabilizing. and Disrupting Dark Networks.*

Summary

Social network analysis, using four centrality measures, was used to analyze the Sinaloa cartel's network as a backdrop for development of a disruption strategy. Results suggest there is quite a small group of high ranking members within the Cartel structure indispensable for successful performance of the organization, namely Joaquín "EL CHAPO" Guzmán Loera, Ismael "EL MAYO" Zambada and Juan José "EL AZUL" Esparragoza Moreno.

Nevertheless, centrality metrics do not always completely capture a network's vulnerabilities. For instance, both Joaquín "EL CHAPO" Guzmán Loera and Ismael "EL MAYO" Zambada score high in all of the centrality measures, but, observing the sociogram of the Cartel network, their removal, although critical, would not totally fragment the network. This hypothesis has been seemingly confirmed with the arrest of Joaquín Guzmán in January 2016. His arrest weakened the Sinaloa cartel, but did not result in its total fragmentation. The clusters would still be intact and the Sinaloa cartel would most likely continue to operate. The organization has lost its high ranking members before, and many of Cartel's associates are dead or in prison, but it has continued to live on, an indication of its resiliency. Available research suggests that targeting the most central actors for removal or isolations is not always the optimal solution, especially considering the relative strength of upper-level management, such as Gonzalo "EL MACHO PRIETO" Inzunza Inzunza and others who can rise to assume leading positions.

The use of social network analysis offers an additional optic to illuminate the Sinaloa cartel organizational structure. It provides the necessary magnification of the network to identify key individuals and their locations to enable targeted operations. But these don't have to be always kinetic in nature, such as removal by arrest or killing, but non-kinetic, such as deception campaigns against individuals rated with high connection to the power centers.[342] These individuals provide the optimal platform to inject misinformation into the network and produce the greatest disruptive effects such as friction to force preemptive attacks against other members causing a fragmentation or weakening of the organizational structure. In case of the Sinaloa cartel a suggestion shall be explored to target the upper-level management, the lieutenants managing specific territory or trafficking routes.

Among the weaknesses of centrality metrics is that it focuses to quantifying the structural importance of individuals within a network, but not inevitably, which actors are important for the whole network. This weakness could prove problematic when attempting to neutralize members of the Sinaloa cartel to disrupt the network's operational cabilities or to identify optimally positioned actors to disseminate information and disinformation, attitudes, and behaviors rapidly to undermine the network's effectiveness. Fortunately, a set of key player metrics has been developed to address this important limitation.[343]

As noted earlier, a high degree of correlation exists concerning degree, closeness, and eigenvector centrality. However, they do differ substantially from the optimal set of key players identified in terms of fragmentation; indeed, more overlap occurs between the key player fragmentation metrics and the betweenness centrality scores. In terms of a deception operation,

[342] Roberts, "Strategies for Combating Dark Networks."
[343] Stephen P. Borgatti, "Identifying Sets of Key Players in a Social Network," *Computational, Mathematical and Organizational Theory* 12, no. 1 (2006).

it can be seen that some overlap exists between the key player diffusion algorithm and the other rankings. All of this suggests that before any final decisions are made, additional data mining and information gathering on the Sinaloa cartel network is probably in order. The next chapter discusses strategies and recommendations for the disruption of PSINs, including the Sinaloa cartel.

Formulating Additional Strategic Counter-approaches

Building upon insights provided by the social network analysis, there are two basic counter–approaches to apply, each of them offering a variety of strategies. The kinetic route mostly consists of directing brute force at the problem, potentially in a form of highly professional surgical strikes of special forces of the police or military targeting illicit networks and their individual members. Despite the fact that such direct action has been extensively deployed to date and can effectively contribute to diminishing threats, it is certainly not the only tool available. Especially, considering the fact it may be detrimental to achieving more pervasive results. Certainly, elimination of a key member within an illicit network creates an immediate gap. Nevertheless, this gap is usually only temporary, and the network is likely to exhibit more fervor in response.[344] Therefore, when contemplating an effective counter-PSIN strategy, it is essential to consider a complementary combination of kinetic and non-kinetic measures that would allow authorities the greatest level of control. The indirect route strategies might include information operations, reconciliation and reintegration operations.

The ultimate objective of a counter-strategy goes beyond a simple disruption of illicit network. Among the advantages of a decentralized network is that disruption or elimination of some of its hubs or other internal ties does not disrupt the operation.

Policy recommendations

The previously mentioned analytical tools are all interdependent of each other. Formulating and developing an efficient disruption strategy will require deployment of all elements of national power. The following recommendations are based on the exploration of the PSINs financial practices and geospatial, temporal, and SNA of its organization.

Social Network Analysis: Kinetic Options

In the field of SNA, the recommendation for kinetic approach centers on the elimination of key nodes and links within the network, between individuals, groups, and organizations.[345] The recommendation is based on the results of identification of key actors in terms of closeness, betweenness, eigenvector, and degree centrality measures. Based on these measures, I contend that the individuals listed in the previously displayed SNA must be captured, killed, or neutralized in other way.

Neutralization is not designed exclusively for PSIN leadership, it is vital component of disrupting PSIN‘s money flows as well. It is important to continue aggressively targeting the PSIN‘s financiers and accountants. Through the apprehension of its financiers the illicit

[344] Roberts, “Strategies for Combating Dark Networks”, 4.
[345] Ibid.

network is deprived of specialized skill labour not easily replaced, which in turn, degrades the network's ability to sustain its operations.

Removal of the top key players results in fracturing of the illicit network by breaking communications and splitting it into smaller clusters. In consequence, key players should be taken into consideration when contemplating decapitation and kill/capture strategy. In contemplating apprehension as preferable alternative to killing, it is important to realize that PSIN's leading individuals detained in Mexico usually preserve their control and influence over operations in their organization organization.[346] Therefore, to limit the detainees in exercising their influence remotely over the illicit network, it is necessary to extradite them into the United States and seek their complete isolation.

Other considerations

There are two important factors worth considering when executing the kinetic approach against individuals with high closeness centrality in any given PSIN. First, individuals with a high closeness centrality are strongly embedded in the network's core and would not be susceptible to rehabilitation or counter-ideology tactics.[347] Second, some illicit networks possess the ability to effectively replace individuals from the top tier management quickly and thus they remain highly resilient against hostile attempts to disrupt the network.[348] For instance, the individuals with high eigenvector centrality are among most suitable candidates as they are members of the network with close ties to highly central members and therefore may be in a position to replace existing management figures. Moreover, they may have in-depth knowledge of the inner workings within the illicit network mostly due to their close proximity to current leadership. Thus, it may be worth considering to also target those network members who do not rank as present leaders, but more as emerging or future leaders because of their close relationship with current leaders. Nevertheless, a disruption strategy relying exclusively on a kinetic approach will produce only limited results.

Social Network Analysis: Non-Kinetic Options

In contrast to kinetic options, non-kinetic approaches take longer to implement, but once effectively deployed, these can substantially contribute to a disruption strategy. Non-kinetic options directed against PSINs would primarily focus on deploying a deception strategy against network members rated with high betweenness centrality.[349] The contention is that these actors would provide the optimal platform to inject pieces of misinformation into the illicit network and produce the maximum disruptive results. The desirable end state with this approach is to provoke implosion or fragmentation within the illicit network.

Actor within the network who display high rates of betweenness centrality are those who exercise leverage among clusters and groups within the illicit network due to their positions of brokerage. Presumably, the misinformation inserted will provoke enough friction to motivate

[346] "Drug Gangs 'Self-Rule' Mexican Prisons," *Eidard*, April 30, 2011, http://eideard.wordpress.com/2011/04/30/drug-gangs-self-rule-mexican-prisons.
[347] Roberts and Everton, "Strategies for Combating Dark Networks", 16.
[348] Ibid., 11.
[349] Ibid., 14.

preemptive attacks against other network members, which in turn causes a fragmentation and weakening of the network's organizational structure.

In summary, the use of SNA provides additional perspective in analysis of the PSIN's organizational structure. It provides the desirable insights into the network identifying key actors and their respective locations to enable purposeful targeted operations. At the same time, it highlights critical venues to employ non-kinetic approaches. It is vital to realize that in developing disruptive strategy, the metrics and graphs on PSINs should be used concurrently, since the failure to do so can prospectively produce a faulty strategy. Another important fact worth considering is that the elimination of highly central actors may have only temporary disruptive effect on the network.[350] Mexican PSINs often proved themselves as highly flexible organizations, which demonstrated high levels of resilience multiplied with the ability to replace leadership figures in a relatively short periods of time. Therefore, the approach suggested here promotes tactics to affect both individuals central to the network and actors on its periphery. Undoubtedly, targeting the PSIN's organizational structure is a vital prerequsite in debilitating its operational capacity.

Other Available Kinetic and Non-Kinetic Approaches:

Capacity Building and Targeting

The persistent strategy of the Mexican government relies on counter-leadership targeting, which has produced limited results thus far. Nevertheless, it is vital for the targeting at this level to continue against the PSIN's infrastructure. Additional effort, complementing the leadership elimination, should include the targeting of the PSIN's white-collar supporting infrastructure. All the lawyers, accountants, and politicians working for the Sinaloa cartel must be pursued with the same intensity as the network's leadership. This approach should substantially degrade the network by targeting affiliated actors who have specialized skills and who are not easily replaceable.

A likely improvement to the current strategy would be to shift to a simultaneous multidirectional offensive. Such a strategy requires a substantial increase in the nation state's security capacity. On behalf of the largest drug consuming as well as neighbouring countries, the United States can assist with the capacity building efforts by supplying training and logistics to facilitate the execution of multiple targets simultaneously. Additional support may take form of providing airlift assets, weapons systems and ammunition, etc. It is plausible to assume that the U.S. training personnel on Mexican soil may not be politically feasible course of action and therefore more of a nontraditional methodology is desirable.

The government of Mexico currently limits the presence of U.S. troops on its territory, which partly hinders the ability of U.S. military to train and provide assistance to Mexican forces. In such an instance, two possible courses of action may be contemplated. The first option is to bring Mexican troops into the United States for training and to increase its operational size. The second option is to involve a partner force that would be able to operate in Mexico without the restrictions imposed on U.S. forces. In recent past, the National police of Colombian

[350] Sean F. Everton, *Network Topography, Key Players and Terrorist Networks* (Monterey, CA: Naval Postgradate School, 2009), 1.

supplied their Mexican counterparts with training.[351] Prospectively, Colombians could continue or potentially even expand their training role in Mexico.

Mexican Legal System and Extradition Treaty

At this time, the United States and Mexican governments have a formal bilateral extradition treaty.[352] Unfortunately, the process is mostly formal and very unproductive in practice as demonstrated by the fact it took four years to extradite the former leader of the Gulf Cartel.[353] Moreover, the current extradition process allows for only limited access to timely intelligence products, which in turn reduces the effectiveness of existing operations. The obvious recommendation would be to amend the current extradition framework to expedite the process.

By expediting extradition process into the United States, negotiations could develop under different legal circumstance and actionable intelligence can be obtained. Another important aspect of the Mexican judicial system is the absence of capital punishment.[354] Potential threat of capital punishment imposed on individuals committing mass attrocities, or crimes against humanity in general, may serve as deterrence for potential PSIN recruits.

Infiltrating the PSIN

In general, the Mexican PSIN's approach to illicit activities has demonstrated innovation and adaptability.[355] The same approach must be adopted in order to defeat them. A strategy which includes penetration of a PSIN can substantially degrade its illicit capacities. One of the methods to penetrate a network's organizational infrastructure is to try to ideologically turn some selected detainees against the PSIN and then allow them to return before their position is compromised. Once the selected actors are persuaded to cooperate, responsible authorities must ensure that these individuals remain under their control and that they are willing to attend rehabilitation. Then, maximum effort should be mustered to exploit their access to their respective networks. Once they supply the dsirable information, there should be an effort to rehabilitate them. In ideal circumstance, this method would be directed against financiers and logisticians since these individuals have access to other members of the network and can be potentially persuaded with offering of rewards.

Another method suggested follows up directly on the apprehension of network's financiers and logisticians. Targeting financiers and seizing large amounts of profits should weaken the network significantly, and drive a PSIN to increase already established relationships

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[351] Juan Forrero, "Colombia Stepping Up Anti-Drug Training of Mexico's Army, Police," *The Washington Post,* January 21, 2011, http://www.washingtonpost.com/wp-dyn/content/article/2011/01/21/AR2011012106325.html.
[352] United States Of America and The United Mexican States Treaty, *Extradition Treaty Between the Uniter States of America and Mexico*, No. 19462 (4 May 1978), https://treaties.un.org/doc/Publication/UNTS/Volume%201207/volume-1207-I-19462-English.pdf.
[353] Nathan Patrick Jones, "Why Extraditing Mexico Drug Traffickers Could Strengthen Drug Gangs," *Insight Crime*, August 18, 2011, https://www.insightcrime.org/news/analysis/why-extraditing-mexico-drug-traffickers-could-strengthen-us-gangs/.
[354] Marion Lloyd, "Mexico: Death Penalty Gaining Support," *Huffington Post*, February 14, 2009, http://www.huffingtonpost.com/2009/01/14/mexico-death-penalty-gain_n_157868.html.
[355]Abigail Catherine, "Human and Drug Trafficking," *TalkingDrugs*, July 7, 2011, http://www.talkingdrugs.org/human-trafficking-fuelled-by.

with corrupt law enforcement and government officials to protect its assets and the use of intelligence collection.[356] In consequence, this larger demand for corrupt officers and intelligence on law enforcement operations will make a PSIN vulnerable to further penetration attempts. By using a reversed penetration methodology, law enforcement agents can prospectively hope to gain access to the network.

Finally, the Mexican armed forces and law enforcement units experience a significant number of desertions,[357] which generates recruitment opportunities for PSINs. Turning a problem into an opportunity, dessertions might provide another venue for penetrating the organization. The intent here would be to equip an intruder with the essential and attractive skills to infiltrate a PSIN.

Operations Countering the Public Perception

In comparison a more subtle, but very important, approach consists of disruption of the PSINs‘ image. Over the last number of years, illicit networks in Mexico enjoy certain degree of popularity and glorification of their criminal image among general population. It is not unusual for young males to identify themselves with some of the most notorious PSINs, like the Sinaloa cartel. Unfortunately, this greater-than-life image projection provides trafficking networks with a recruitment advantage. It is plausible to assume that the distortion of PSINs' public image can decrease their recruitment ability. Among possible procedures to distort the image is to empower some of the many emerging vigilante groups. These groups usually enjoy support of local population and therefore have unlimited access to specific areas. Arguably, providing military organization and resources to vigilante groups could serve as a deterrent to PSINs‘ presence within their local areas. For the law enforcement effort organizing and equipping these groups would generate force multipliers to deny PSINs their operational space and safe havens.

Moreover, with a smaller group delivering a notable blow against the illicit network may generate a substantial positive psychological impact against the PSINs. Along with such an offensive action a corresponding extensive information operations campaign must develop. Ultimatly, the objective would be to replace the current strong image of the Sinaloa cartel and other PSINs with a much fragile alternative, as well as to formulate the message to convince the general population that submission to PSIN control is not the only available option.

Improving Intelligence Cooperation

The operational tentacles of many Mexican PSINs reach into several countries in Central America, South America, and the United States.[358] A more extensive intelligence fusion effort is essential prerequisite to optimize the disruption strategy. Increase and improvement in collaboration among law enforcement entities internationally would supply the desired

[356] Samuel Logan, "Los Zetas: Evolution of a Criminal Organization," *EHT Zurich,* March 6, 2009*,* http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch-Archive/Detail/?id=97554.
[357] Rey Rodriguez, "Army Desertions Hurting Mexico's War on Drugs," CNN, March 11, 2009, http://articles.cnn.com/2009-03-11/world/mexico.desertions-drug-cartels.
[358] Lisa J. Campbell, "Los Zetas: Operational Assessment," *Small Wars and Insurgencies* 21, no. 1 (March 2010): 62–63.

actionable intelligence flow between various elements interested in disrupting the illicit network.

Among possible options is to create a joint cyber-platform for all key law enforcement and state security agencies in the different countries affected by the PSINs' presence and enable them to optimize the sharing of mutually useful information. For example, the use of an intelligence-friendly software such as Palantir Government could provide a connection to national law enforcement entities in Central America with a task forces in the United States and Mexico. Such platform will promote and improve intelligence fusion by sharing information of recent operations against particular illicit network.

Areas for Further Research

The study presented in this dissertation only scratches the surface of the Sinaloa cartel network and provides a snapshot in time of this illicit enterprise. Significant time restrictions led to the narrowing of the focus on the Sinaloa cartel's activities in Mexico. To expand the understanding of this trafficking enterprise, research should be conducted outside Mexico's boundaries as well. The Sinaloa cartel has both regional and international connections in several countries across continents, such as Guatemala, Honduras, El Salvador, Belize, Colombia and the United States. They also expanded their market reach into Western Africa and Europe by establishing strong contacts with European criminal organizations.[359] Undoubtedly, the employment of SNA as discussed in this thesis will continue to represent indispensable tool in further exploring the Sinaloa cartel and other profit-seeking illicit networks in the region.

[359] Tim Johnson, "The Long Tentacles of Los Zetas," *McClatchy: Mexico Umnasked,* July, 15, 2010, http://blogs.mcclatchydc.com/mexico/2010/07/the-long-tentacles-of-los-zetas.html.

CONCLUSION

Until the beginning of the 20th century narcotics were simply a commodity, then cultural shifts in the West made drugs synonymous with deviancy, moral degeneration and evil. Today, global illicit drug trafficking is a complex and in many aspects fascinating phenomenon not only morally, but also socially, economically, legally, politically, culturally and even militarily.

From the strategic counter-narcotics perspective, illicit drug trafficking has been a source of serious frustration, since there has been very little success over the last five decades in combating the phenomenon. In the grand scheme, the War on Drugs has failed to deliver its intended objectives and existing counter-narcotics policies have had very limited effect on reducing drug use, despite the fact it is costing the taxpayers across the Americas a fortune. Nowadays, drug use is rampant with illicit narcotics set to become more available and be better quality than ever before and drug-related violence becoming ever more brutal and widespread. In general public's perception, brutal and excessive violence has become the most fascinating of all the salient features of illicit drug trafficking with the overall number of victims reaching well into hundreds of thousands, be it drug users, traffickers, law enforcement officers or mere civilians.

Albeit a prominent feature, brutal violence is merely a symptom and the real genius of drug traffickers is not in their capacity to inflict pain upon their enemies and competitors, it is in their business acumen. As I repeated on several occasions throughout the thesis, illicit trafficking is a profit-seeking enterprise and from strategic economic perspective it is indeed admirable that in relatively short period, low level local smugglers built international illicit empires, whose most powerful representatives today can compete with Fortune 500 companies in terms of their corporate success. Business models of illicit enterprises have proven viable, efficient, flexible and resilient. Traffickers have demonstrated impressive creativity in adapting to changing conditions within the global operational environment, taking advantage of opportunities offered by globalization, and ultimately using their circumstances to help their business grown exponentially.

As much as this corporate success is admirable, the immeasurable levels of related suffering are still infuriating. People across the Americas suffer from illicit drug trafficking on daily basis, be it economic, social or security exposure both individually and collectively. Indeed, as long as there will be demand for drugs, there will entrepreneurs supplying the product to the market. While eradication of illicit drug market is illusory, it is unacceptable to let the traffickers to continue operating with relative impunity from law and law enforcement across many countries in the Americas, while wielding the power to succumb individuals, governments and countries to their will by means of corruption or violence. Hence the ultimate ambition of this thesis to provide viable counter-strategy.

The first prerequisite is to recognize the prevalent hypocrisy in the conversation about illicit trade, not only in narcotics. The general notion is that it represents a moral problem, issue of bad values, that these are acts performed by unscrupulous people. In other words, it is a moral concern and as such it should be dealt with at courts, churches, and in classrooms. The courts deliver rightful legal rulings and punishments, the churches teach essential moral values, and the proper education in classrooms prevents children from becoming drug users, traffickers or criminals. It is still quite uncommon to hear the notion that illicit drug trade, and illicit trade in general, is not stimulated by low morals but by extremely high profits. The very strong

economic forces at work here are touching very basic human instincts, be it the need to consume narcotics to deal with world's problems or buying a famous brand purse for a tenth or more of its store price. Expecting governments to intervene where there are millions of customers eager to do either of those is a difficult request.

On the other hand, there are measures that can be and should be adopted. The first is to provide national governments with suitable tools to deal with illicit drug trade and illicit trade in general. To equip governments to deal with this trade, two steps are required. First step is to defragment governments and second is to unburden them. The case of the United States might serve as a suitable example to illustrate defragmentation. In the United States there are several public agencies with drug trafficking related jurisdictions. Department of Treasury is in charge of controlling money laundering; Department of Commerce and Revenue is in charge of controlling counterfeiting; Drug Enforcement Agency is responsible for narcotics; Bureau of Alcohol, Tobacco and Firearms controls firearms; Immigration and Customs Enforcement deals with human trafficking. Naturally, all these federal agencies communicate but it is very hard to achieve good coordination and efficiency.

In comparison, the traffickers are not exclusively specialized in any single activity, but they are experts in transportation. Yesterday the smuggled cocaine, today it is people, tomorrow it can be weapons. They are experts in logistics. Illicit trade in is not market-specific or product-specific, it is function-specific. Governments must develop a more integrated view that mirrors in many ways the approach of those criminals they are supposed to be fighting. But that is impossible because now everything is criminalized.

The notion of unburdening of governments refers to relieving them from pursuing crimes that are extremely difficult to deal with and focusing on what is important. In other words, governments should focus on making sure that women and children are not traded internationally, rather than have limited government resources wasted on ensuring that block buster movie or a famous writer's book will not be released on internet a week before their premiere. Let the entertainment and other industries to develop protective technologies and mechanisms on their own and let governments to focus on the narcotics, weapons trade, trafficking in humans. All these trades are much more serious threats to our security and individual well-being than copied movies and music DVDs.

While recognizing and emphasizing the value of intelligence work and surgical military strikes removing key figures in the management of illicit enterprises in order to disrupt their operations, my key recommendation would be to put economists, not soldiers, in charge of formulating and executing complex omnidirectional offensive strategies targeting actual not presumed centers of gravity in illicit drug trafficking. That is if the War on Drugs is finally to be taken seriously.

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